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REPORTS FROM SELECT COMMITTEES ON THE SALMON AND SEA FISHERIES OF THE UNITED KINGDOM WITH MINUTES OF EVIDENCE AND APPENDICES

1805-33

Fisheries

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IRISH UNIVERSITY PRESS

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REPORT

FROM THE

COMMITTEE

On the Petition of Meſſrs. CHALMERS and COWIE.

SWEDISH HERRINGS.

Ordered to be printed 29th March 1805.

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THE COMMITTEE to whom the Petition of Meſſrs. CHALMERS and COWIE, was referred;—

HAVE, purſuant to the order of the Houſe, examined the matter of the ſaid Petition:—To prove the Allegations whereof;

JOHN MACKENZIE, Eſq. a merchant in London, being examined, ſaid, He had great experience in the Britiſh Herring Fiſhery; and had been applied to in November 1800 by Mr. Wilberforce, a Member of the Houſe, and alſo a Member of the Committee then ſitting, "To conſider of the high price of Proviſions; and "to whom ſo much of His Majeſty's moſt gracious Speech from the Throne to "both Houſes of Parliament, as related thereto, and alſo the ſeveral Petitions pre-"ſented to the Houſe, complaining of the high price of Proviſions, were referred."

The Witneſs ſaid, That the application made to him by Mr. Wilberforce, was for information reſpecting the ſtate of the Britiſh Herring Fiſhery in the North of Scotland, the ſupply of Herrings being at that time an object much deſired on the part of the public, in conſequence of the Herring Fiſhery on the north-weſt coaſt of Scotland having totally failed that ſeaſon, and the ſupply was rendered peculiarly deſirable in conſequence of the then ſcarcity of Corn, and the very high price of all kinds of Proviſions.

The Witneſs ſaid, He gave the beſt information in his power to Mr. Wilberforce, and ſuggeſted an opinion, that a large ſupply of Herrings could be obtained from Sweden; and he at the ſame time ſtated to Mr. Wilberforce, that, in his opinion, Meſſrs. Chalmers and Cowie (the Petitioners) were the moſt fit perſons to effect that object; and he was thereupon requeſted to apply to Meſſrs. Chalmers and Cowie for information on the ſubject.

The Witneſs ſtated, That he applied to Meſſrs. Chalmers and Cowie accordingly, and found them ready to furniſh the information required of them. And he afterwards applied to them to furniſh the ſame information in writing, together with a plan of the means by which a large importation of Swediſh Herrings might be obtained; which they did, and the plan was ſubmitted to Mr. Wilberforce; and the Witneſs underſtood, by a letter from Mr. Wilberforce, that it was afterwards delivered to Mr. Pitt.

The Witneſs ſaid, He never underſtood Meſſrs. Chalmers and Cowie had ever imported a barrel of Herrings for the ſupply of the Weſt India market, or elſewhere; and he was induced to mention their names, and to apply to them, becauſe he knew they were Swediſh merchants, and had extenſive commercial connexion at Gothenburgh.

The Witneſs ſaid, That, in conſequence of the plan ſo delivered, he was requeſted by Mr. Wilberforce to wait upon and confer with Mr. Pitt upon the ſubject; and that he applied to Meſſrs. Chalmers and Cowie to accompany him in ſuch conference; and they accordingly went with him to the Proviſion Committee, in the expectation of ſeeing Mr. Pitt, or ſome Member of the Executive Government; but Mr. Wilberforce came from the Committee, and informed them, that Mr. Pitt was particularly engaged, but that he (Mr. Wilberforce) hoped the buſineſs would be accompliſhed; and Mr. Wilberforce then took minutes, in writing, of further information he received from Meſſrs. Chalmers and Cowie.

The Witneſs ſtated, That the inducements held out to Meſſrs. Chalmers and Cowie to engage in the importation of Swediſh Herrings were, that ſuch importation would be a public benefit; and that Government would facilitate the buſineſs, by granting an immediate Act of Parliament for the free importation of Swediſh Herrings. Theſe inducements, he underſtood, were held out by Mr. Wilberforce.

The

The Witneſs further ſaid, That the advanced ſeaſon of the year, and the probability of the froſt ſetting in on the coaſt of Sweden before the Herrings could be obtained, were difficulties that ſtood in the way of any perſon engaging in the then propoſed importation.

He ſaid, That he ſaw the calculations of Meſſrs. Chalmers and Cowie, of the probable coſt of the Herrings, and at the price at which they were propoſed to be ſold, which left only a fair mercantile profit upon ſuch a capital as would be neceſſary to be employed; and that, from the whole of the Witneſs's obſervation on the conduct of Meſſrs. Chalmers and Cowie, while the ſubject was under conſideration, he believed their object was very patriotic, in contributing to the relief of the poor, and at the ſame time not to neglect their own intereſt as merchants; and that, if they had not interfered in the importation, it could not have been accompliſhed that ſeaſon.

The Witneſs further ſaid, That the price of Britiſh Herrings in the London market, at the beginning of 1801, was from 35 to 40*s.* per barrel, and he believed the Swediſh Herrings would have ſold for nearly the ſame price.

WILLIAM WILBERFORCE, Eſq. a Member of the Houſe, informed the Committee, That in the month of November 1800, he applied to Mr. Mackenzie for information upon the ſubject of the Scotch Herring Fiſhery, and that he afterwards received from Mr. Mackenzie the information required, and alſo information furniſhed by Meſſrs. Chalmers and Cowie of the means of obtaining a large ſupply of Herrings from Sweden; that he received ſuch information both in writing and verbally.

Mr. Wilberforce informed the Committee, That he could not poſitively recollect what became of the information he received in writing, but he had no doubt of his having communicated to ſome gentlemen in office the information he had received.

Mr. Wilberforce further informed the Committee, That theſe tranſactions having paſſed ſeveral years ago, having taken no notes of them, and not having been aware that it would ever be neceſſary to give any account of them afterwards, he was not ſo careful as he otherwiſe ſhould have been to fix them in his memory, but having had his memory refreſhed by the peruſal of a letter written by himſelf to Mr. Mackenzie at the time, he had no doubt of his having intimated to him that Mr. Pitt wiſhed to ſee ſome of the Swediſh merchants on the ſubject; and Mr. Wilberforce further ſtated, that he was authorized by Mr. Pitt to ſay he would be happy to ſee them.

Mr. Wilberforce further informed the Committee, That he had no doubt of his having repeatedly conferred with Meſſrs. Chalmers and Cowie on the ſubject in queſtion, and being requeſted to inform the Committee whether, in the communications he had with Meſſrs. Chalmers and Cowie, he conſidered himſelf as acting with the concurrence of the Proviſion Committee; he anſwered, that he was only a ſingle individual on the Proviſion Committee, and from the nature of the caſe it was impoſſible for him to ſuppoſe himſelf in any way empowered by the Committee, but he could have no doubt of the Committee's having felt the ſame deſire as himſelf to promote every meaſure by which the ſupply of Proviſions could be increaſed during that period of ſcarcity; and he ſtated, as a confirmation of his perſuaſion, that the Proviſion Committee in general felt in common as he did; that the Bill for allowing the importation of Swediſh Herrings, which Bill, he ſaid, he believed was recommended by the Proviſion Committee, and afterwards paſſed by the Houſe, and was not oppoſed, but on the contrary ſupported by every Member of the Committee.

Mr. Wilberforce further informed the Committee, That he could not doubt of the Government having been deſirous of ſeeing the ſcarcity alleviated, and that they proved their diſpoſition to ſupport the plan by giving their ſupport to the Bill in its progreſs through Parliament; that he believed the Bill was brought in by a Member of Government.

The Right honourable GEORGE ROSE, alſo a Member of the Houſe, informed the Committee, That the Bill for allowing the importation of Swediſh Herrings

Herrings was directed to be brought in by himſelf, Mr. Long, and Mr. Bragge, and to the beſt of his recollection it was the anxious wiſh of Government that the Bill ſhould be effectual for the attainment of its object.

ROBERT MILLIGAN, Eſq. a Weſt India merchant, was next examined, and ſaid, That he perfectly recollected Salted Herrings were both very ſcarce and dear in the month of November 1800, occaſioned by the dearth of Proviſions, and the ſhort fiſhery; that ſalted fiſh is certainly a material and important article of ſupply for the uſe of the negroes in the Weſt Indies, and at the period referred to conſiderable apprehenſions were entertained by the Weſt India merchants that the neceſſary ſupply of Britiſh Salted Herrings would not be obtained, and in conſequence of that apprehenſion the Weſt India merchants at that time preſented a Memorial to the Lords of the Treaſury, requeſting to be permitted to import Swediſh Herrings upon the ſame terms as imported into Ireland.

The Witneſs further ſtated, That in the expectation that permiſſion would be given to import Swediſh Herrings, he applied to Meſſrs. Chalmers and Cowie, making a propoſition to take 4 or 5,000 barrels, provided they would engage to ſupply them within two months, and at 30*s.* per barrel, but they declined binding themſelves either as to time or price.

He further ſtated, That he found it a very difficult matter to procure the quantity he wanted, and was obliged to purchaſe 1,000 barrels in London, in March 1801, at the price of 45*s.* per barrel on board; and had Meſſrs. Chalmers and Cowie's Herrings arrived early in the year 1801, he thought they might have ſold the whole quantity at from 25 to 30*s.* per barrel.

ROBERT COWIE, Eſq. being examined, ſaid, That about the 20th of November 1800, he was firſt applied to by Mr. Mackenzie to furniſh information on the ſubject of the Swediſh Herring Fiſhery, who ſtated that his inquiries were in conſequence of the requeſt of ſome Members of the Proviſion Committee of the Honourable Houſe of Commons; that the Witneſs and his partner Mr. Chalmers were requeſted to commit all the neceſſary particulars of the Swediſh Herring Fiſhery to writing, and to point out when and by what means a large quantity might be imported from Sweden for the information of the Proviſion Committee; that he prepared ſuch a plan, and delivered it to Mr. Mackenzie, who tranſmitted it in a letter to Mr. Wilberforce to be laid before the Proviſion Committee; and Mr. Wilberforce in his reply ſtated that he had delivered it to Mr. Roſe, one of the Members of that Committee.

The Witneſs further ſtated, That by Mr. Wilberforce's reply to Mr. Mackenzie's letter, they (Meſſrs. Chalmers and Cowie) were requeſted to come up without delay, and converſe with Mr. Pitt, who had authorized Mr. Wilberforce to ſay that he ſhould be glad to ſee Mr. Mackenzie and the Swediſh merchants on the ſubject, and alſo to confer with the Committee.

The Witneſs further ſtated, That he and Mr. Chalmers went up with Mr. Mackenzie the next day to confer with Mr. Pitt, but as he could not be ſeen Mr. Wilberforce came out from the Committee, and converſed with them a long time on the ſubject; that Mr. Wilberforce made very full and pointed inquiries, and took down the ſubſtance of all their (Meſſrs. Chalmers and Cowie's) replies and obſervations in writing, for the purpoſe of carrying them into the Committee, which he did; and as the information given was material to the object which Government had in view in procuring a large importation of Swediſh Herrings, the Witneſs had the moſt undoubted reaſons to know and believe it was ſo communicated. The reaſons he gave for ſuch knowledge and belief were, firſt, that his information was acted upon immediately after it had been diſcuſſed in the Committee, by His Majeſty's Miniſters bringing in a Bill for the expreſs purpoſe; 2dly. that it appeared by reference to the Minute Book of the Proviſion Committee, N° 3. that on the 28th of November the ſubject was under their immediate conſideration, and perſons were then examined as to the effects likely to be produced on the Home Fiſheries by the free importations of Swediſh Herrings being allowed; various other ſubſequent proceedings were had by the Proviſion

Committee on the ſubject of Herrings; and on the 8th of December the Proviſion Committee proceeded to a final diſcuſſion on the ſubject of Herrings, and on the next day, the 9th (Meſſrs. Chalmers and Cowie) were acquainted with the intention of Government to bring in a Bill for the importation of Swediſh Herrings, and on the 12th the Reſolution was agreed to by a Committee of the whole Houſe:

"That it would be expedient to allow the importation of Swediſh Herrings "duty free."

Mr. Cowie further ſtated, That Mr. Milligan in his own name, and that of Mr. George Hibbert, both eminent Jamaica merchants, applied to Meſſrs. Chalmers and Cowie very frequently on the ſubject, and that they underſtood thoſe gentlemen always to convey the general ſenſe of the Weſt India Committee of Merchants and Planters, and that they (Meſſrs. Chalmers and Cowie) from conferences with the Members of the Proviſion Committee and of the Weſt India merchants, were led to conſider the importation of Swediſh Herrings of great and urgent importance; that Meſſrs. Milligan and George Hibbert did not apply on behalf of the Weſt India merchants at large, but that he knew, from former experience, that the importation of Swediſh Herrings to the port of London was a deſirable object to the Weſt India merchants.

Mr. Cowie further ſaid, That Meſſrs. Chalmers and Cowie were never at all connected in the importation of Swediſh Herrings before the inſtance in queſtion, but were for many years much in correſpondence with the principal ſhippers of the article, who were merchants at Gothenburg; and that they (Meſſrs. Chalmers and Cowie) were induced to engage in this importation from the extreme diſtreſs of the Country, and the deſire expreſſed by Government, and by ſeveral members of the Proviſion Committee, to obtain an importation; alſo the urgent ſolicitations of the Weſt India merchants, and a fair expectation of reaſonable advantage in the employment of their capital.

Mr. Cowie further ſtated, That on the 9th of December he received aſſurances, as before ſtated, that Government had determined to bring in a Bill to allow the free importation of Swediſh Herrings; Mr. Roſe and Mr. Wilberforce both furniſhed him with that information; and that Meſſrs. Chalmers and Cowie, in conſequence of ſuch information, and in confidence of the aſſurance received, immediately diſpatched a Cutter to Gothenburg with orders to make ſuch purchaſes, and continued their advices by the mails to that effect.

That the Witneſs conſidered it important to order the purchaſes without waiting the paſſing of the Act, as every thing depended on ſeaſon; and no time was to be loſt after it was aſcertained, that Government felt the importance of the meaſure, and would enable them to act; that the news of the Act of Parliament reaching Sweden would greatly tend to enhance the prices, if all between this country and Sweden had continued peaceable.

The Act of the 41ſt of His Majeſty, cap. 18, which paſſed on the 31ſt December 1800, allowing the importation of Swediſh Herrings duty free, was read.

Mr. Cowie was then further examined; and ſaid, That it was repeatedly expreſſed by Mr. Roſe and Mr. Wilberforce (Members of the Proviſion Committee) before the paſſing of the Act, that no time ſhould be loſt in making arrangements to ſupply the market: He further ſtated, that when the Cutter arrived in Sweden, towards the end of December 1800, the Fiſhing was juſt began, and rather ſcanty appearances of fiſh, which prevented Meſſrs. Chalmers and Cowie's friends from making purchaſes as the prices were high; but when their ſubſequent advices by the mails reached them, all dated in December, ſtating that veſſels were agreed with, and orders given to diſpatch others to load, they began to execute their orders, and adviſed they had been complied with under date of the 17th January 1801.

That Meſſrs. Chalmers and Cowie ſecured from 19 to 20,000 barrels of fiſh, and they agreed with various Swediſh captains of veſſels to run over and load the Herrings; and had given orders to charter and ſend Britiſh veſſels from Leith.

Mr. Cowie further ſtated, That the embargo, which took place on the 14th of January 1801, created an alarming ſenſation, and put an inſtant and total ſtop to (Meſſrs. Chalmers and Cowie's) operations, of which event they were ſo utterly ignorant and ſo unprepared, that only on the day previous they had written in the fulleſt confidence to their correſpondents at Gothenburg to go on with all poſſible expedition.

expedition. That, in conſequence of this embargo, they wrote on the next following poſt, that this terrifying meaſure had blaſted all hopes of the importation, and was big with danger to all property; but too ſoon finding they were actually committed to the value and extent mentioned; they by Memorial to His Majeſty in Council, applied for Licences and Protections to the Swediſh ſhips they had engaged in England, and for thoſe adviſed to be ready and loading at Gothenburg. That there was no permiſſion granted by the Britiſh Government to enable them to import the Herrings. The protecting Licences were refuſed for the ſhips engaged here; but promiſed, though never actually granted, for thoſe at Gothenburg; from February until the 7th of March they were endeavouring to procure thoſe Licences, when they were informed from the Council Office, that a general order would appear in the Gazette, permitting all Ruſſian, Swediſh, and Daniſh ſhips to import Proviſions and Naval Stores, and guaranteeing Paſſports to them on their return; but this order never did appear. Hence they (Meſſrs. Chalmers and Cowie) moſt unguardedly ſtated againſt themſelves in their Petition, that Licences were granted; whereas in point of fact, no Licences were ever granted; that they (Meſſrs. Chalmers and Cowie) in conſequence, were forced to ſubmit to the great expence of American ſhips to import a great part of the Herrings cleared out for American ports. That Mr. Cowie was informed by Mr. Enos Smith, a junior clerk in the Council Office, that the general order of Council was to appear in the Gazette, which information was communicated to him by letter. The order not appearing in the Gazette, he inquired the reaſon of the delay, but does not recollect the reaſon aſſigned. The ſeaſon for diſpoſing of the Herrings however expiring ſo faſt, he deſpaired of receiving the Licences in time to be of any uſe.

Mr. Cowie ſtated to the Committee the names and dates of the arrivals, and the quantities imported by each of the American ſhips engaged to clear out from Sweden, as if for American ports, as follows:

Recapitulatory Account of American Ships, chartered during the Embargo.

		Time of Arrival.	
2,206	Barrels in the Betſey, Denſon - - -	4th of May	1801.
400	D° - - - Hannah, Gale - - -	9th - -	1801.
1,100	D° - - - Hazon, Allen - - -	3d June -	1801.
1,600	D° - - - Atlantic, Thompſon -	1ſt July -	1801.
2,800	D° - - - Hindoſtan, Meyrick -	24th D° -	1801.
2,000	D° - - - Daphne, Cuſhing - -	27th July -	1801.
10,106	Total quantity by American ſhips.		

Mr. Cowie further ſaid, That thoſe arrivals were not in time for the ſupply of the poor in this Country. He conſulted with Mr. Colquhoun, and made him a tender of them, but Mr. Colquhoun replied, that the Committee by whom the ſupplies of Herrings for the Metropolis had been and were conducted, had a large quantity of Scotch Herrings on hand; and ſhortly afterwards that Committee diſſolved, as no purchaſes were found any longer neceſſary.

That at the time the Herrings arrived the Weſt India fleet had all ſailed, except a few ſhips that were juſt then leaving the river, when the Betſey, the firſt of Meſſrs. Chalmers and Cowie's ſhips, arrived in the port of London. That they uſed every endeavour to diſpoſe of the Herrings; circulated notices to all the Weſt India merchants, and employed all means by Proviſion Brokers and Wharfingers to that effect. He produced a copy of the printed notice ſent to the Weſt India merchants on that occaſion, with a Liſt of all the Weſt India houſes, to which the notice was ſent.

Mr. Cowie further ſtated, That as the enſuing ſeaſon advanced Meſſrs. Chalmers and Cowie ſucceeded in getting off 2,556 barrels only; that in conſequence of their not being able to ſell the Herrings in England, they conſulted with various perſons of experience in this line as to the beſt means of diſpoſing of them, who all agreed that exportation to the Weſt India iſlands was the only practicable mode of diſpoſing of them; and merchants, Weſt India captains, and dealers in Salt Proviſions, were all unanimous in this advice, and Chalmers and Cowie accordingly acted upon this advice.

That

That in order to render the Herrings which were not ſold in this Country as productive as poſſible, they were carefully repacked according to the uſual practice of Herrings deſtined for the Weſt Indies, ſhipped in good order, one cargo to Mahon and Italy, and the reſt to all parts of the Weſt India iſlands, and two large cargoes under an agent of great perſonal experience and influence in moſt of the iſlands (Mr. Arthur Strother.)

That the meaſure of ſhipping off the Herrings for ſale on their own account, was the only poſſible advantageous diſpoſition of them, and the reſult ſhews, that they thereby yielded above £.8,600. That Meſſrs. Chalmers and Cowie did not rely altogether on the exertions of their agents in the ſale of the Herrings, but wrote many letters to their friends in the iſlands, procured the moſt reſpectable introduction to other correſpondents, and being then at peace with France, ſent two cargoes to St. Domingo, and had their agents recommended by perſons of authority at Paris to Benezech the Prefect, and to the Aid de Camp of Le Clerc the Commander in Chief; but the ſucceſs in the diſpoſal of the Herrings was very ſlender and the loſs very great. That the low prices obtained for the Herrings, muſt be attributed in general to the glut of Herrings in the Weſt Indies that ſeaſon, the conſequence of the extreme ſcarcity and dearneſs of them in the two preceding ſeaſons, and to the precariouſneſs of this article itſelf, which renders it difficult to preſerve ſound for any length of time in hot climates eſpecially.

Mr. Cowie produced an Account of the coſts and charges attending the purchaſe and importation of the Herrings, and of the net proceeds of the ſales, ſo as to ſhew his actual loſs in money; a Copy of which Account your Committee have ſubjoined in an Appendix (No. 1.)

Mr. Cowie ſtated to the Committee, That he had carefully examined the Account produced, and could therefore take upon himſelf to ſtate moſt poſitively that the Account is correct and true in every particular. The Vouchers, by which the items of the Account produced are eſtabliſhed, Mr. Cowie ſtated to have been produced and delivered with many other Vouchers and Affidavits to the Commiſſioners of the Cuſtoms, when they examined into the facts of this tranſaction during many months, by orders of the Lords of the Treaſury, and that the whole were ſent up by the Commiſſioners of Cuſtoms to the Treaſury, with their Report in confirmation of the facts ſtated by Meſſrs. Chalmers and Cowie in their Memorial to the Lords of the Treaſury.

Mr. Cowie then produced a Liſt of the Vouchers he ſtated to be at the Treaſury, a Copy of which Liſt your Committee alſo ſubjoin in an Appendix (No. 2.)

The Witneſs further ſaid, That the Account produced, ſhewing a loſs of £.35,035. 18 *s.* 9 *d.* is an Account of payments and receipts merely, and does not include any item of intereſt, commiſſion or profit; that Account ſhews the money that they (the Petitioners) have actually diſburſed in this unfortunate importation beyond their receipts for the produce of the ſales; but their loſs he ſtated to exceed that amount by many thouſands, ariſing from ſo large a capital being locked up now four years, alſo from the returns of the actual ſales in ſome parts of the Weſt Indies not being realized, and from ſome bad debts, ſo that their actual loſs would be found to exceed £. 50,000.

That in general, £. 10. per cent per annum, is reckoned a very moderate return of capital in regular trade, in which caſe, and taking into account bad debts which would have been avoided, and adding many other miſchievous effects of this fatal buſineſs, he could conſcientiouſly ſay, that the capital employed in this tranſaction, might, in the ordinary courſe of their mercantile and agency buſineſs, have been increaſed at this period to £.60,000.

That he (Mr. Cowie) received ſeveral Accounts of ſales effected in the Weſt Indies in 1802, which ſhewed a diſappointment and loſs in part; but till the ſales more generally arrived in 1803, they could not clearly aſcertain the extent of the loſs; thoſe further Accounts which came in that year enabled them to make up an Account in July, and they preſented a Memorial to the Lords of the Treaſury, ſtating the circumſtances of their loſs ſome months afterwards, when they could aſcertain with ſufficient correctneſs that no further returns were to be expected.

Mr. Cowie further ſtated, That his regular and accuſtomed trade and commiſſion buſineſs preſented ſufficient and more certain advantages, but his motives and thoſe

of

of his partner, were to benefit the Country, to follow up the wiſhes of Government, and open a branch of trade of an important nature, and in a high degree beneficial to the Weſt India colonies, as the repeated memorials and ſolicitations of the Merchants and Planters to Government for many years paſt would fully prove.

He further ſtated, That in communicating the information and plan, Meſſrs. Chalmers and Cowie did to Mr. Mackenzie, and in the ſubſequent conferences they had with Mr. Wilberforce, and the information given by them in ſuch conferences, they underſtood they were acting throughout by the wiſh and at the requeſt of the Proviſion Committee, although through the interference of individuals; and the Witneſs gave the following reaſons for ſuch underſtanding,—there was no Swediſh merchant, nor any other perſon who gave information to the Committee but themſelves; that information was laid before Mr. Roſe and Mr. Pitt, as he was informed by Mr. Wilberforce, and acted upon by Government.

So that the importation was created by the Act before alluded to.

He alſo ſtated, That from the beginning to the end of the tranſaction, in the meaſures they purſued, they acted in confidence of this underſtanding; they were diſtinctly told by Mr. Roſe, that the prohibition againſt the exportation of Britiſh Herrings would continue in force, ſo that their importation would go to ſupply the Weſt India demand; and they would not have written a letter on the ſubject of the importation, had they not underſtood it was the wiſh and at the deſire of the Proviſion Committee and of the Government, and no other mercantile houſe whatever having acted upon that occaſion but themſelves, renders theirs an unique caſe.

Mr. Cowie further ſtated, That had the paſſing of the Act taken off the prohibition and the diſtreſs of the Country, and the demand for the Weſt India market been previouſly known to him, it was not at all in his contemplation that he ſhould have engaged in the importation, without the communications he had with the Committee, and the deſire expreſſed that he ſhould wait upon Mr. Pitt, who had expreſſed a wiſh to ſee them upon the ſubject. That at the time they engaged in that importation, they had no aſſurance that an embargo would not take place, nothing having paſſed on the ſubject; the embargo was therefore quite unexpected, as the Act for allowing the importation of Swediſh Herrings paſſed on the 31ſt of December 1800, and on the 14th of January following the order for the embargo was iſſued; but during that interval, their property was committed to the extent ſtated. The probability of ſuch an embargo did not enter into their conſideration, at the time of giving their firſt orders.

Being aſked, Whether he received any communication from the Committee, except that the prohibition would be taken off? Mr. Cowie ſaid, That he and his partner received from the Committee, or Members of the Committee, whoſe names have already been mentioned, the ſtrongeſt encouragements to import, as the diſtreſs at that time was very urgent: that the encouragement held out by thoſe Members was the great demand for the article, as a meaſure benefiting the poor, and to ſupply the Weſt India market; and that the prohibition againſt exporting Britiſh Herrings would continue in force.

CHARLES CHALMERS, Eſq. the partner of Mr. Cowie, is a merchant in London; and, being examined, confirmed the evidence of Mr. Cowie, ſtating himſelf to be well acquainted with all the facts to which Mr. Cowie had been examined, and having been preſent at all the conferences referred to in the evidence of Mr. Cowie.

The Witneſs further ſtated, That he had ſeveral interviews with Mr. Roſe, when his partner was not preſent, and received upon ſuch interviews the ſtrongeſt encouragement to proceed in the importation of Swediſh Herrings; that the encouragement ſo received went farther than an aſſurance, that the importation of Swediſh Herrings ſhould be allowed; and Mr. Roſe particularly preſſed him to uſe every expedition in the power of himſelf and his partner, to bring the Herrings to England.

That, in one of the interviews the Witneſs had with Mr. Roſe, he told him, Meſſrs. Chalmers and Cowie had diſpatched a Cutter to Sweden, with orders for the fiſh; of which Mr. Roſe highly approved, and requeſted the Witneſs and his

partner would uſe every expedition in their power, which would highly benefit the Country at that period; that this latter converſation took place about four or five days after the Cutter had been diſpatched.

The Witneſs further ſaid, That the promiſe ſtated in the evidence of Mr. Cowie, that Licences would be granted for the ſhips engaged by Meſſrs. Chalmers and Cowie in England, was communicated firſt, verbally, by Mr. Enos Smith, one of the clerks in the Council Office; and then by letter from the ſame clerk, which the Witneſs produced; and alſo by aſſurances to the Witneſs by Mr. Fawkener and Sir Stephen Cottrell: That the aſſurances given by Mr. Fawkener and Sir Stephen Cottrell were, "That their Lordſhips had conſidered the application of the Witneſs "and his Partner, and, from the hardſhip of their caſe, in not being able to get "the cargoes to market, Licences would be granted." The Witneſs ſaid, he had been informed, that the delay reſpecting the Licences had been occaſioned by His Majeſty's then indiſpoſition; but the Witneſs had no reaſon to know why the general order or proclamation, ſpoken of in the evidence of Mr. Cowie, did not appear in the Gazette; and he could not recollect whether he had received any information that ſuch order would appear in the Gazette, except by letter from Mr. Enos Smith.

Mr. ROBERT GEORGE STEELE, the principal and confidential clerk of Meſſrs. Chalmers and Cowie, was examined; and ſaid, That he was well acquainted with all the mercantile tranſactions of Meſſrs. Chalmers and Cowie, and with all their operations reſpecting the importation of Swediſh Herrings in 1801; he ſaid, that they had not been engaged in the importation of Herrings before that time.

The Witneſs then confirmed the evidence of Mr. Cowie, as to the dates of the different arrivals of the Herrings in queſtion; the meaſures taken by the Petitioners to effect ſales of the Herrings; and the coſts and charges attending their purchaſe and importation; and alſo the proceeds of the ſales.

THOMAS ROWCROFT, Eſq. a merchant, and one of the aldermen of the city of London, being examined, ſtated, That he ſaw the Herrings imported by Meſſrs. Chalmers and Cowie, in the year 1801, which, in their original ſtate, were good and merchantable Swediſh Herrings; but when he ſaw them they did not appear to have been freſh, but to have been delayed in the importation; and the Witneſs adviſed their being ſent to the Weſt Indies for ſale, as the only means of making any thing of them, there being no ſale for them in England.

Mr. HENRY ANDERSON, a dealer in proviſions, and wharfinger, being examined, ſtated, That he had the charge of the whole 19,500 barrels of Swediſh Herrings, imported by Meſſrs. Chalmers and Cowie. He confirmed the evidence of Mr. Cowie, as to the dates of their arrival; the previous ſailing of the ſpring fleets for the Weſt Indies, in 1801; the fiſh being of a good quality; the endeavours uſed to effect ſales in England; and the meaſures taken to render them fit for exportation.

JOHN FOULERTON, Eſq. a merchant in London, and a Scotch factor, and Mr. LAWRENCE BRUCE, formerly a captain in the Jamaica trade, but ſince retired, being ſeparately examined, ſpoke to the ſame facts as Mr. Anderſon. The Witneſs, Bruce, had purchaſed ſome of the Herrings prepared for exportation; and the three laſt Wineſſes agreed, that the conduct purſued by Meſſrs. Chalmers and Cowie, in exporting the Herrings to the Weſt Indies for ſale on their own account, was proper and prudent; and that this was the only meaſure which could have been purſued to avoid a total loſs of the property.

Mr. ARTHUR STROTHER, a merchant in London, being examined, ſaid, That he proceeded to the Weſt Indies, at the requeſt of Meſſrs. Chalmers and Cowie, in the beginning of December 1801, as ſupercargo, to effect ſales of a quantity

quantity of Swediſh Herrings imported by them. The Witneſs ſtated, in confirmation of Mr. Cowie's evidence, that he had examined the account of payments and receipts hereto annexed, and marked Appendix (N° 1.) which he ſaid was correct, as far as the part of the Herrings under his management.

The Witneſs further ſtated, That he was alſo in the Weſt Indies in the months of May and June 1801, and that he had the ſtrongeſt reaſon to believe, that, had the Herrings been in the Weſt Indies at that time, they would have ſold exceedingly high, from the obſervations he made on the ſtate of the markets at that period.

The Act of the 41ſt of His Majeſty, cap. 10. (paſſed on the 15th of December 1800) was read; by the 3d ſection of which a bounty was ſecured to the importers of Corn, equal to the difference between the market price after arrival and the price mentioned in the Act of Parliament.

The Act of the 41ſt of His Majeſty, cap. 21. (paſſed on the 31ſt December 1800) was alſo read; by the 17th and 18th ſections of which, perſons entitled to a bounty upon *exporting* Pilchards were allowed to ſell them for home conſumption, and receive the bounty as if they had been exported. By the ſame Act, advantages were alſo held out to perſons engaged, or who ſhould engage, in the Fiſheries at that period.

CLAES GRILL, Eſq. the Conſul General for Sweden, being examined, ſaid, That, in January 1801, he made application, through the Swediſh Ambaſſador, to the Britiſh Government, for allowance for maintenance of the crews of ſuch Swediſh ſhips as were detained by embargo in the ports of Great Britain and Ireland; the Witneſs received from Government, in conſequence of that application, at the rate of 3*s.* 6*d.* per day for each captain, 2*s.* per day for each mate, and 1*s.* 3*d.* per day for each of the remaining part of the crew, amounting in the whole to about £. 24,000.

The Witneſs ſaid, He had every reaſon to believe that a ſimilar application was made, and with ſimilar ſucceſs, on behalf of the Daniſh ſhips detained by the ſame embargo, as the Witneſs was preſent, and attended with Mr. Wolfe, the Daniſh Conſul, upon Mr. Roſe, at the Treaſury, when the allowance to be made was ſettled; and the Witneſs ſaid, he believed the ſum received by Mr. Wolfe was about £. 22,000; this money, he ſaid, was given to afford maintenance to the men during their detention by the embargo.

The Witneſs further ſtated, That he had always looked upon Meſſrs. Chalmers and Cowie as merchants in the commiſſion line; and that he did not know of any inſtance of their buying goods on their own account.

DAVID BRISTOW BAKER, Eſq. a merchant in London, being examined, ſaid, That he had received ſeveral ſums of money from J. F. Hage, who was a Commiſſioner on the part of the Daniſh Government, to arrange the outſtanding claims of the Daniſh ſubjects in the Weſt India iſlands upon the Britiſh Government, which ſums were placed in the Witneſs's hands on account of the Daniſh Weſt India Company; and he underſtood the ſums were paid by the Engliſh Government on account of ſhips, or other Daniſh property, detained by Britiſh cruizers. The Witneſs ſaid, he had alſo received ſums on the ſame account for other Daniſh ſubjects, amounting altogether to £. 47,261.

ROBERT COWIE, Eſq. being again examined, ſaid, That, as agent for the Swediſh Eaſt India Company, he had received various ſums of money of the Britiſh Government for loſſes ſuſtained by three Swediſh Indiamen, one of which was ſeized at the Cape of Good Hope, another at St. Helena, and a third on the North Seas, and all brought into Britiſh ports, under the Order in Council of the 14th January 1801: That there had been an allowance made by Government for Swediſh ſailors impreſſed and taken to India; for anchors, ſails, and cables, and a variety of port charges; beſides the maintenance of officers and crews, and the expence of furniſhing great part of one of the crews; the whole amount received by the Witneſs for the three ſhips was about £. 4,200.

The

The Witneſs further ſtated, That he had not received any allowance or compenſation for his loſſes from the Swediſh Government, nor had he any claim upon that Government, as the ſhips with his property on board were not prevented from ſailing by any Act of the Swediſh Government, but the fear of being captured in England had detained them in the Swediſh port.

The Witneſs further ſaid, That he had never before, or ſubſequent to the importation of the Herrings in queſtion, purchaſed goods of any deſcription upon ſpeculation; but that his trade had been ſolely that of a Commiſſion Merchant, except in one inſtance about twenty years ago, which was a very ſmall purchaſe.

GEORGE COWIE, Eſq. a merchant in London, being examined, ſaid, that he had received from the Tranſport Board, in conſequence of an application to the Lords of His Majeſty's Treaſury, the ſubſiſtence money for the maſters and crews of five ſhips, detained at Gibraltar during the embargo laid on by His Majeſty's Order in Council of the 14th January 1801, amounting to £. 731. He alſo received for the dock hire of the ſhip Cron Prince Guſta Adolph, and for another ſhip, named the Wanſgapen, her full freight, although her cargo of fruit, which was ſold by order of Government, did not produce ſo much as the *freight amounted to.*

Appendix (N° 1.)

A SCHEDULE of the Coſts and Charges of Nineteen thouſand Five hundred and Seventy-three Barrels of HERRINGS, purchaſed in SWEDEN, and of the Proceeds of the ſame, in ſo far as theſe have been realized.

The VOUCHERS alphabetically arranged according to the Margin.

		£.	s.	d.	£.	s.	d.
A.	Coſt at Gothenburg of 2,000 barrels, per the Betſey - - Coſt and all Charges				2,250	—	—
B.	Of 7,311 barrels, purchaſed up by our order, per David Mitchell, of Gothenburg - - - - - - - -				9,881	10	—
C.	D° - - - - D° - of 10,262 per Low and Smith of Gothenburg - - - - - 19,573 barrels.				13,994	17	7
D.	Coſt of inſurance premiums on the above quantities from Gothenburg to London - - - - - - - - £.	212	10	—	724	7	11
		511	17	7			
E.	Freights to American ſhips hired during the embargo, on 10,106 barrels of the above quantities - - - - - - - -				5,318	11	7
F.	Freights to Swediſh and Engliſh ſhips, after the removal of the embargo, on the remaining quantity 9,467 barrels, from Gothenburg to London - - - - - - - - - - - -				2,415	17	7
G.	Coſt of two cargoes of ſalt from Liverpool, to preſerve and repack the Herrings, with freight and inſurance - - - - -				695	—	8
H.	Cooperage, labour, charges inwards, wharfage, lighterage, and Cuſtom-houſe officers - - - - - - - - - - - - -				5,053	18	6
I.	Inſurance from fire - - - - - - - - - £.	69	17	9			
K.	Charges outwards on the quantities ſhipped for ſales, per Wharfinger's account - - - -	387	5	7			
	Wilkinſon and Son's account, bonds, &c. - -	126	8	6			
	Searchers fees - - - - - - - - - - - -	245	3	6			
					828	15	4
	Total coſt and charges of thoſe Herrings - - £.				41,163	19	2

The ſeaſon (which, at the lateſt, is February and March) being entirely loſt, by the detention occaſioned by the embargo here and in Sweden, the firſt preventing all charters of Britiſh veſſels, and the laſt all Swediſh ſhips, from moving: Every meaſure of publicity and induſtry that could be adopted, as appears by the circular letter herewith marked L. was tried, to effect a ſale againſt the next approaching ſeaſon; all that could be effected in that way was the following quantity, as will appear per Voucher

		£.	s.	d.
M.	2,556 - - Barrels - - - - - - - - - amount to -	4,162	14	3
	which ſum deducted from the coſts of the whole quantity as already ſtated, and the amount of coſt, being - - - - - - - - - - - - - -	41,162	19	2
	Left a ſtock of 17,017 barrels at the coſt price, and charges of - - - - - - - - - - - - -	37,000	4	11
	Making on an average nearly 44*s.* per barrel.			

No further ſales at any price being practicable in conſequence of the peace, and the ſeaſon for the Britiſh Fiſheries drawing on, no other expedient was left to prevent a total deſtruction of the property but to ſhip theſe Herrings to the Weſt India iſlands, &c. on account of the proprietors.

Accordingly the various ſhipments under mentioned took place:

2,500 - - Barrels, per the Sir Hyde Parker, captain Niven.
1,700 - - - D° - per Anne - - - - captain Jackſon.

4,200 - - Barrels for Barbadoes, and for all or any of the leeward and windward iſlands, Foreign and Britiſh, under the direction of Mr. Arthur Strother, an Agent of experience and fidelity.

The freight fixed at the loweſt obtainable rate was 5*s.* per barrel - -	£. 1,050	—	—
Primage, £. 5. per Cent. - - -	52	10	—
Cuſtom-houſe charges and lighterage	31	1	2
Inſurance on £. 6,500. - - £. 2. 10*s.* per cent. and ſtamps - - - - - -	170	12	6
		1,304	3	8

1,100 - - Barrels, per the General Moore, captain Worts, to Mahon, Leghorn, and Naples, that no practicable method or market might be left untried.

Freight, 8*s.* per barrel - - -	£. 440	—	—
Primage, 10*s.* per cent. - - - - -	44	—	—
Charges as above - - - - - - -	38	15	—
Inſurance on £. 2,000 - - - - - -	65	—	—
		587	15	—

150 - - Barrels, per Purſuit, Bonadaile, to Surinam;
500 - - D° Arethuſa, Allard, to Curacao;
220 - - D° Dedalus, Powels,
300 - - D° Suſpence, Wray, to Antigua;
300 - - D° Maria, Fernis, to Madeira and Demerara;
300 - - D° Accompliſhed Quaker, Burdon, for St. Kitt's;
200 - - D° Juſtina, Rooke, to Martinique;
In all 1,970 barrels;

The freight paid whereon was -	£. 551	5	—
Primage - - - - - - - - - -	27	11	3
Shipping charges, fees, &c. - - -	80	2	—
Inſurance - - - - - - - - -	81	—	—
	739	18	3

8,220	Barrels, in ſuitable quantities, were ſhipped by eighteen ſhips nearly about the ſame time to the ſundry ports in Jamaica, as freight at a moderate rate could be obtained, and ſuch information got as rendered a ſale probable, giving them every chance of ſale at intermediate ports. See liſt N. The amount of freight, charges, and inſurance thereon are	£.	s. d.
		3,267	8 6
	And finally to St. Domingo (part of the Anne's cargo having been ſold there, though to a loſs) with orders to proceed to Jamaica if no ſale could be got, all the reſidue of the original quantity, increaſed by repackage 383 barrels.		
1,910	Barrels per the Sarah, Lightley.		
	Freight £.620 15 —		
	Primage 31 12 —		
	Lighterage, fees, &c. 61 13 6		
	Inſurance on £.4,000 110 — —		
		824	— 6
	Thus the original coſt, and the charges of forwarding to market the quantity unſold, amount to	43,723	10 10
17,400			

The Sales and Proceeds of ſuch of theſe Exports as have been ſold, are as follows:

O.	Net proceeds of ſales, per Sir Hyde Parker and Anne	£.2,359	4 6
P.	D° D°, per General Moore at Mahon 135 8 2		
	Leghorn *S*/3,932 17		
	a ex. 53[d] 868 6 10		
		1,003	15 —
Q.	Net proceeds of ſales of 1,670 barrels, part of		
	1,970 D° to Surinam, Curacao, Antigua, &c.	902	15 9
	N. B. Of the remaining 300 barrels to St. Kitt's no report of ſales.		
R.	D° D° of 7,920, part of		
	8,220 to Jamaica	4,421	16 10
	The reſidue, 300, laying unſold, or of which we have no report of ſales.		
	By deducting the above proceeds from the coſt and charges of the Herrings, as above	43,723	10 10
	The actual loſs at preſent will be found	35,035	18 9

Since the above ſtatement was cloſed, account ſales have been received of the 1,910 barrels, per Sarah, which were ultimately delivered at Jamaica, no poſſibility of ſale being found at St. Domingo, and the charges exceeded the proceeds per £.88. 8. 4. See Davies' accounts in R.

Appendix (N° 2.)

PARTICULARS and CONTENTS of VOUCHERS.

A. JAMES LYONS Account Current with CHALMERS and COWIE; dated 12th November 1801.

Letter from Low and Smith, and from D. Mitchell, dated Gothenburg, 31ſt December 1800, adviſing the purchaſe of 1,000 barrels, each at R. D. $\frac{6}{7}$ 6,000 R. Ex. at 5. 16. £. 1,125. each drawn on him.

Stampt agreement of ſale, J. Lyon to C. & C.; dated London, 2d April 1801, at the invoice price.

N. B. In virtue of our paying the above bill drawn on him and all other charges.

The letters or notes from J. Lyon to C. & C. reſpecting the charter of the Betſey, Denſon maſter, and the payment of his balance.

B. Letter from D. Mitchell to C. & C. Gothenburg, 21ſt January 1801, adviſing the purchaſe of 8,000 barrels, per £. 9,140. and his having drawn for the ſame.

Account of charges at Gothenburg on the above quantity, amounting to R. D. £. 3,636. or £. 3,597. Exchange a. 6. £. 599. 13. 3.

Recapitulation by C. & C. making the exact coſt with intereſt and poſtages charged to us in his account current, &c. £. 141. 16. 9. £. 9,881. 10.

C. Letter from Low and Smith, Gothenburg, 17th and 21ſt January 1801, adviſing purchaſe of 10,000 barrels, at 6. R. D. per barrel, and adviſing their drafts per £. 12,140. ſtg.

Their account of charges on the above parcel at Gothenburg, dated 25th November 1801, R. D. 4,124. with duplicate in Swediſh annexed, ſigned Law, Tarras and Anderſon, and Wholfahrt; dated Gothenburg, 29th May 1802, and a tranſlation attached.

Their account current; dated 25th November 1801, making a balance of £. 462. 13. 6. due them.

Recapitulation by C. & C. making the exact coſt with intereſt and charges, ſay poſtages charged to us in ſubſequent account current, £. 432. 19. 9.—£. 13,994. 17. 7.

D. Account of Inſurances effected, ſpeci ying the policies in number fourteen, balance £. 724. 7. 11. Witneſſed by W. Dorrington, keeper of the Policy Book for Chalmers and Cowie.

E. Samuel Gales receipt for freight, £. 220.; 21ſt May 1801.

Henry Anderſon's note of delivery.

Bills of lading per 206 barrels, and 2,000 barrels, per Betſey, Denſon, the laſt indorſed "James Lyon."

W. Beatſon and Co's note of freight and ſettlement with C. & C. thereof, 16th May 1801, per the above Betſey, £. 1,212. 15.

Denſon's affidavit of delivery.

C. Williams's note of freight, per Hiſen; 10th June 1801, £. 632. 10.

Bill of lading, per 1,100 barrels, per do.

Freight note, per Indoſtan, per 2,800 barrels, amount £. 1,540. 25th Auguſt 1801.

Charterparty, per Atlantic, Thompſon maſter, Liverpool; 30th March 1801.

Rumill's account of freight, per Atlantic, and ſettlement thereof, £. 1,598. 12. 1. 3d Auguſt 1801; ſigned Wallis, Cooke, and Hammond.

Freight note, per Daphne, B. Cuſhing maſter, £. 889. 10. 6; 9th Sept. 1801.

Charter, per ditto; London, 20th April 1801.

Freight

F. Freight note, per Speculation, Timan maſter, 10th Auguſt 1801, 1,623 barrels, £.293. 5. (Signed) Sundius and Dodds.

Bills of lading, per ditto.

Bill of lading, per Charlotte, Andrews maſter, 1,776 barrels, 6th Auguſt 1801.

Freight note, per ditto, £.408. 5. 6.

Freight note, per St. Johannes, Kirchoft maſter, 2d September 1801, 1,276 barrels, £.311. 16. (Signed) Hoffman and Dobie.

Bill of lading, per ditto.

Freight note, per Exchange, Johnſon maſter, 1,176 barrels, £.287. 8.

Bill of lading, per ditto, Gothenburg, 24th Auguſt 1801.

Freight note, per Marguretha, Lamberg maſter, 23d September 1801, 700 barrels, £.201. 5. (Signed) Sundius and Dodds.

Bill of lading, per ditto.

Freight note, per Fortuna, Ifvenberg maſter, 25th September 1801, 850 barrels, £.207. 14. 8. (Signed) Sundius and Dodds.

Bill of lading, per ditto.

Freight note, per Maria, Willes maſter, 22d October 1801, 1,250 barrels, £.323. 8. 9. (Signed) Van Buuren and Co.

Bill of lading, per ditto.

Freight account, per Alliancon, Biorkman maſter, 15th October 1801, 3420 barrels, £.380. 14. (Signed) Sundius and Dodds.

Bill of lading, per ditto.

G. Invoice of 60 tons, per Chance, Bexfield maſter, per Hanny and Logan, Liverpool, 17th Auguſt 1801.

Ditto of 100 tons, per Ruth, Pugh maſter, per ditto, Liverpool, 27th October 1801.

H. Account, ſigned Wenings and Sherman, coopers, Auguſt 10th, 1801, to 22d May 1802, for remaking and repacking 5,624 barrels, £. 1,178. 13.

Ditto, ditto, 1,913 barrels, at Three Cranes, unheading, fitting up, heading and coopering, ſigned ditto, November and December 1801, April 26th to 30th May 1802, £.176. 5. 3.

Ditto, ditto, unheading, fitting up, and heading and coopering 6,834 barrels, at Hubbert's wharf, Cherry-gardens, 10th October to 26th December 1801, £.630. 13. 6.

Ditto, ditto, ditto, 1,473 barrels ditto, at ditto, ditto, 21ſt September, reducing and remaking, &c. to 7th November, £.247.

James Roſe's account: drawing, remaking, repacking 709 barrels, and 570 ditto, landing, wharfage, houſing, ſhipping, &c. £.331. 13.

Henry Anderſon's account, dated 28th July 1802, of landing, entry, wharfage, lighterage, land waiters, weighers, watching, and rent of all the cargoes inwards, 19,567 barrels, £.926. 1. 4. except the wharfage, &c. of the quantities landed at other wharfs.

Rowcroft and Wood's account of landing, wharfage, houſing, rent, and ſhipping 8,564 barrels, and charges on ſalt, per the Ruth, £. 37. 9.—£.665. 17. 4.

George Brown, Chamberlain's Wharf, account of wharfage, landing, unpacking, repacking, porterage, rent, and ſhipping 3,264 barrels, £.362. 17. 3.

Turner and Rutherford's account of wharfage and reſhipping 1,418 barrels, £.59. 1. 8.

T. Bolt, Dice and Smart's Quays, and Freſh and Trig's Wharfs; wharfage, landing, houſing, lighterage, ſhipping, and rent of 1,100 barrels, £.127. 11. 11.

J. White, Kennet Wharf; landing, wharfage, houſing, rent, and rolling away 1,000 barrels £.93. 1. 2.

A memorandum ſlip, ſtating that widow Atkinſon and Co. bill of £.271. 18.

Landwaiters account, fees, &c. on 6,467 barrels £.22. 2.

Henry

K. Henry Anderſon's account of charges in ſundry ſhipments,
in all - - 19,304 barrels.
and - - 950 gained by repacking.

20,254 - - - - - - £. 387. 5. 7.

C. and E. Williamſon's account inwards £. 22. 8. 6.
Scavage and entries outward - - - - - - - - - } - - - £. 108. 14. 0.

N. Bills of loading, per the Alert, M^c Donald; Hazard, Cummins; Sarah Ann, Hunter; Alfred, Pariſh; Aurora, Coleman; Arethuſa, Dods; Northumberland, Wake; Lady and , Haddon; Cora, Bruton; Montego Bay, Allen; Trelawney Planter, M^c Donald; Viciſſitude, Stout; Latona, M^c Grath; Crown, Proctor; Ann. Atkins; Stranger, Pearce.

O. Thomas J. Pierce's account ſales of Herrings at Barbadoes (extracted from his general accounts furniſhed us) ſigned by him, 1,066 barrels.
Raithby and Moſs's ditto, at St. Vincent's, 400 barrels.
John Brooker ditto, at Anguilla, 100 barrels.
R. S. Turtin's ditto, at Demarara, 400 barrels.
W. Brown and Co's. ditto, at Trinidad, 300 ditto.
George Robertſon and Co's. ditto, at Surinam, 100 ditto.
John Campbell and Co's. letter from Tobago, 29th November 1802, giving account of the fate of the quantity ſent, 140 barrels.
Arthur Strother's original letter to us, dated Port-au-Prince, St. Domingo, 13th March 1802, adviſing the ſale of the Anne's cargo there.

P. Captain Clement Worts's letter from Leghorn, 12th February 1802, with account ſale of 50 barrels at Mahon.
Dupouy Brother's account ſales, Leghorn, 13th September 1802, with the note annexed by us, thus,

Groſs ſales of the within account - - - - - - - - -	5,216	13	3
Of all the charges except the freight (already entered in Schedule, p. 4 - - - - - - - - -

Stewart Galloway and Co's. account ſales, per the Trelawney Planter, Jamaica, 1ſt March 1802.

Ditto's account ſales, per Crown, ditto, ditto, ditto.

Ditto's letter of advice, ditto, ditto, ditto.

Captain Roberts' account ſales, per Naid, with abſtract thereof, per C. and C.

Captain M'Grath's account ſales, per Latona, 6th Auguſt 1802.

Alexander Davidſon's account ſales, per Ann, Montego Bay, 31ſt July 1802.

Captain Pariſh's account ſales, per Alfred. Kingſton, 22d June 1802.

Newham's account ſales, and letter of advice, per the Northumberland, Kingſton, 29th May 1802.

G. Johnſon's account ſales, per ditto, Falmouth, 15th October, and letter of advice (with abſtract or ſummary, per C. and C.)

Henry Weſt and Co's, account ſales, per Stranger, Kingſton, 4th October 1802.

Captain George Stoat's account ſales, per Viciſſitude, 22d December.

Copy, Alexander Langland's account ſales, per ditto, Montego Bay, 8th September 1802 (with ſummary, per C. and C.)

Cooke, Reynolds, and Co's. letter of advice and account ſales of part of the Camperdown's cargo, Port Maria, 26th January 1803.

Captain John Hunter's account ſales, per Sarah Ann.

Account ſales, per the Alert, M'Donald, Davis, and Co's. account ſales, per Montego Bay, Kingſton, 4th January 1803.

Ditto's account ſales, per Sarah, ditto.

Ditto's account ſales, per Hazard, ditto, with abſtract, per C. and C. adding the freight as being already entered in the Schedule.

R. Newby's account ſales, per Aurora, St. Ann's Bay, 20th March 1803, with account current and certificate.

Beſides all Accounts and Vouchers contained in A. to R. there were alſo furniſhed, viz.

Bills of loading for the ſhipment of the 1,100 barrels to Mahon and Italy.

4,200 } ditto to Leeward Iſlands.
1,970 }

Bills of loading, per Sarah, 1,910 barrels; and tranſlation of letters of advice; ſay, recommendation from Thotrand, a member of the French Government to Citizen Bouguine, Aid de Camp to General le Clerc, Paris, 7 Prairial, Year 8; and from Montre Paris, 22 Prairial, to Mr. Benezech, colonial Prefect, St. Domingo.

Our inſtructions to Captain Lightley.

In reply to the firſt application of the Commiſſioners of Cuſtoms for proofs, the following affidavits were delivered:

Robert Cowie:

Henry Anderſon, Wharfinger and Salt Proviſion Broker, who had the ſuperintendance of the Herrings, and certificates to the Accounts, H. K. and M.

Arthur Strother, an Agent and Supercargo, employed in the export and ſale of two large cargoes, and who certifies the Accounts, O.

Robert George Steele, firſt Clerk in the houſe of Meſſrs. Chalmers and Cowie, who certifies all the Accounts contained in the Appendix, No. 1.

Beſides the above proofs on oath, there were furniſhed:

Bills of lading, accounts, ſales, letters of advice, and every other document attaching to the reſpective accounts.

The above were accompanied by a letter from Meſſrs. Chalmers and Cowie, dated 31ſt March 1804.

To the ſecond application of the Commiſſioners for further proofs, the following were delivered:

A Liſt of all the ſhips and cargoes, with the dates of importation, confirmed by a Report annexed of the Land Surveyor at the Cuſtom-houſe.

To

To the third application of the Commiſſioners of Cuſtoms for further proofs, the following were delivered:

The Affidavit of JOHN BENNETT, of Lloyd's Coffee-houſe, ſtating the time when the Weſt-India fleets ſailed.

Affidavit of HENRY ANDERSON, as to the impracticability of ſhipping the Herrings in the early part of the year 1801, and to the offer of ſelling them under the market price, and to the other meaſures taken to diſpoſe of them.

Affidavit of LAURENCE BRUCE, as to the Herrings being merchantable, and the neceſſity of their being repacked.

Affidavit of JOHN FOULERTON, to the like effect, and as to the cauſes which prevented the ſale.

Letter from ROBERT MILLIGAN, Eſq. confirming the allegations in Meſſrs. Chalmers and Cowies memorial to the treaſury.

The above, accompanied by a letter from Chalmers and Cowie, dated 30th June 1804.

REPORT

FROM THE

COMMITTEE

On the Petition of Meſſrs. CHALMERS and COWIE.

SWEDISH HERRINGS.

Ordered to be printed 21ſt March 1806.

John Mackenzie, Eſq. - - - - - - - - - - - p. 3.
William Wilberforce, Eſq. - - - - - - - - - - p. 4.
The Right honourable George Roſe - - - - - - - - - p. 5.
Robert Milligan, Eſq. - - - - - - - - - - - ibid.
Robert Cowie, Eſq. - - - - - - - - - - pp. 6. 13.
Charles Chalmers, Eſq. - - - - - - - - - - p. 11.
Mr. Robert George Steele - - - - - - - - - - p. 12.
Thomas Rowcroft, Eſq. - - - - - - - - - - - ibid.
Mr. Henry Anderſon - - - - - - - - - - - ibid.
John Foullerton, Eſq. - - - - - - - - - - - ibid.
Mr. Arthur Strother - - - - - - - - - - - p. 13.
Claes Grill, Eſq. - - - - - - - - - - - - ibid.
David Briſtow Baker, Eſq. - - - - - - - - - - ibid.
George Cowie, Eſq. - - - - - - - - - - - - p. 14.

APPENDIX (No. 1.) - - - - - - - - - - p. 15.
- - - - - - - (No. 2.) - - - - - - - - - - p. 18.

THE COMMITTEE to whom the Petition of Meſſrs. CHALMERS and COWIE, was referred;—

HAVE, purſuant to the Order of the Houſe, examined the Matter of the ſaid Petition:—To prove the Allegations whereof;

JOHN MACKENZIE, Eſq, a merchant in London, being examined, ſaid, He had great experience in the Britiſh Fiſhery; and had been applied to in November 1800 by Mr. Wilberforce, a Member of the Houſe, and alſo a Member of the Committee then ſitting, "To conſider of the high Price of Proviſions; and "to whom ſo much of His Majeſty's moſt gracious Speech from the Throne to "both Houſes of Parliament, as related thereto, and alſo the ſeveral Petitions pre-"ſented to the Houſe, complaining of the high Price of Proviſions; were referred."

The Witneſs ſaid, That the application made to him by Mr. Wilberforce, was for information reſpecting the ſtate of the Britiſh Herring Fiſhery in the North of Scotland, the ſupply of Herrings being at that time an object much deſired on the part of the public, in conſequence of the Herring Fiſhery on the north-weſt coaſt of Scotland having totally failed that ſeaſon, and the ſupply was rendered peculiarly deſirable in conſequence of the then ſcarcity of Corn, and the very high price of all kinds of Proviſions.

The Witneſs ſaid, He gave the beſt information in his power to Mr. Wilberforce, and ſuggeſted an opinion, that a large ſupply of Herrings could be obtained from Sweden; and he at the ſame time ſtated to Mr. Wilberforce, that, in his opinion, Meſſrs. Chalmers and Cowie (the Petitioners) were the moſt fit perſons to effect that object; and he was thereupon requeſted to apply to Meſſrs. Chalmers and Cowie for information on the ſubject.

The Witneſs ſtated, That he applied to Meſſrs. Chalmers and Cowie accordingly, and found them ready to furniſh the information required of them. And he afterwards applied to them to furniſh the ſame information in writing, together with a plan of the means by which a large importation of Swediſh Herrings might be obtained; which they did, and the plan was ſubmitted to Mr. Wilberforce; and the Witneſs underſtood, by a letter from Mr. Wilberforce, that it was afterwards delivered to Mr. Pitt.

The Witneſs ſaid, He never underſtood Meſſrs. Chalmers and Cowie had ever before imported a barrel of Herrings for the Supply of the Weſt India market, or elſewhere; and he was induced to mention their names, and to apply to them, becauſe he knew they were Swediſh merchants, and had extenſive commercial connection at Gothenburgh.

The Witneſs ſaid, That, in conſequence of the plan ſo delivered, he was requeſted by Mr. Wilberforce to wait upon and confer with Mr. Pitt upon the ſubject; and that he applied to Meſſrs. Chalmers and Cowie to accompany him in ſuch conference; and they accordingly went with him to the Proviſion Committee, in the expectation of ſeeing Mr. Pitt, or ſome Member of the Executive Government; but Mr. Wilberforce came from the Committee, and informed them, that Mr. Pitt was particularly engaged, but that he (Mr. Wilberforce) hoped the buſineſs would be accompliſhed; and Mr. Wilberforce then took minutes, in writing, of further information he received from Meſſrs. Chalmers and Cowie.

The Witneſs ſtated, That the inducements held out to Meſſrs. Chalmers and Cowie to engage in the importation of Swediſh Herrings were, that ſuch importation would be a public benefit; and that Government would facilitate the buſineſs, by granting an immediate Act of Parliament for the free importation of Swediſh Herrings. Theſe inducements, he underſtood, were held out by Mr. Wilberforce.

The Witneſs further ſaid, That the advanced ſeaſon of the year, and the probbility of the froſt ſetting in on the coaſt of Sweden before the Herrings could be obtained, were difficulties that ſtood in the way of any perſon engaging in the then propoſed importation.

He ſaid, That he ſaw the calculations of Meſſrs. Chalmers and Cowie, of the probable coſt of the Herrings, and the price at which they were propoſed to be ſold, which left only a fair mercantile profit upon ſuch a capital as would be neceſſary to be employed; and that, from the whole of the Witneſs's obſervation on the conduct of Meſſrs. Chalmers and Cowie, while the ſubject was under conſiderttion, he believed their object was very patriotic, in contributing to the relief of ahe poor, and at the ſame time not to neglect their own intereſt as merchants; and that, if they had not interfered in the importation, it could not have been accompliſhed that ſeaſon.

The Witneſs further ſaid, That the price of Britiſh Herrings in the London market, at the beginning of 1801, was from 35 to 40 *s.* per barrel, and he believed the Swediſh Herrings would have ſold for nearly the ſame price.

WILLIAM WILBERFORCE, Eſq. (a Member of the Houſe) informed the Committee, That in the month of November 1800, he applied to Mr. Mackenzie for information upon the ſubject of the Scotch Herring Fiſhery, and that he afterwards received from Mr. Mackenzie the information required, and alſo information furniſhed by Meſſrs. Chalmers and Cowie of the means of obtaining a large ſupply of Herrings from Sweden; that he received ſuch information both in writing and verbally.

Mr. Wilberforce informed the Committee, That he could not poſitively recollect what became of the information he received in writing, but he had no doubt of his having communicated to ſome gentlemen in office the information he had received.

Mr. Wilberforce further informed the Committee, That theſe tranſactions having paſſed ſeveral years ago, having taken no notes of them, and not having been aware that it would ever be neceſſary to give any account of them afterwards, he was not ſo careful as he otherwiſe ſhould have been to fix them in his memory, but having had his memory refreſhed by the peruſal of a letter written by himſelf to Mr. Mackenzie at the time, he had no doubt of his having intimated to him that Mr. Pitt wiſhed to ſee ſome of the Swediſh merchants on the ſubject; and Mr. Wilberforce further ſtated, that he was authorized by Mr. Pitt to ſay he would be happy to ſee them.

Mr. Wilberforce further informed the Committee, That he had no doubt of his having repeatedly conferred with Meſſrs. Chalmers and Cowie on the ſubject in queſtion: And being requeſted to inform the Committee whether, in the communications he had with Meſſrs. Chalmers and Cowie, he conſidered himſelf as acting with the concurrence of the Proviſion Committee? he anſwered, That he was only a ſingle individual in the Proviſion Committee, and from the nature of the caſe it was impoſſible for him to ſuppoſe himſelf in any way empowered by the Committee, which was in fact a fluctuating Body, on one day very numerouſly attended, on another very thinly; but he could have no doubt of the Committee's having felt the ſame deſire as himſelf to promote every meaſure by which the ſupply of Proviſions could be increaſed during that period of ſcarcity; and he ſtated, as a confirmation of his perſuaſion, that the Proviſion Committee in general felt in common as he did; that the Bill for allowing the importation of Swediſh Herrings, which Bill, he ſaid, he believed was recommended by the Proviſion Committee, and afterwards paſſed by the Houſe, and was not oppoſed, but on the contrary ſupported by every Member of the Committee.

Mr. Wilberforce further informed the Committee, That he could not doubt of the Government having been deſirous of ſeeing the ſcarcity alleviated, and that they proved their diſpoſition to ſupport the plan by giving their ſupport to the Bill in its progreſs through Parliament; that he believed the Bill was brought in by a Member of Government; and that it was chiefly grounded on the information which came from Meſſrs. Chambers and Cowie, originally through the medium of Mr. Mackenzie, and afterwards perſonally by themſelves; which information

mation was of courſe laid by him (Mr. Wilberforce) before the Proviſion Committee.

Mr. Wilberforce further ſtated, That he did not recollect having held out to the Petitioners any pledge or expectation on the part of the Public, that they would be indemnified againſt loſs, nor did he ever recollect to have heard the idea of his having ſo done ſuggeſted either at that or any ſubſequent period; and he conceived it muſt have been impoſſible for him ſo to do, having no official ſituation, and acting only in the capacity of an individual Member of Parliament who was warmly intereſted in the general wiſh, which was then felt, to relieve the public diſtreſs, by adding to the Stock of National Proviſions.

Being requeſted to inform the Committee, whether in the various communications he had with the Petitioners, he had expreſſed to them any earneſt wiſh or deſire that they ſhould engage in the importation in queſtion? Mr. Wilberforce anſwered, That he did not diſtinctly recollect the particulars of the converſations he had with the Petitioners, but he had no doubt whatever of his having felt, and therefore he thought it very probable that he might expreſs a wiſh that the Petitioners, as well as any other Swediſh merchants ſhould bring into the country a large additional ſtock of food.

The Right honourable GEORGE ROSE, (alſo a Member of the Houſe,) informed the Committee, That the Bill for allowing the importation of Swediſh Herrings was directed to be brought in by himſelf, Mr. Long, and Mr. Bragge, and to the beſt of his recollection it was the anxious wiſh of Government that the Bill ſhould be effectual for the attainment of its object.

Being requeſted to inform the Committee whether he recollected the purport of any converſation which paſſed between him and the Petitioners, and whether he ſuggeſted to them any pledge on the part of the Country, that they ſhould be guaranteed from loſs? Mr. Roſe ſtated, That at the diſtance of five years from the tranſaction in queſtion, the Committee would not be ſurprized at his not recollecting particulars; but he was perfectly ſure that he gave no ſuch pledge on the part of Government, nor held out any expectation of indemnification, becauſe if he had he would have felt it his duty to have given every furtherance in his power to any claim of the parties for reaſonable indemnification, having always conceived that excluſive of any moral obligation, it was inexpedient in point of policy, that the Public ſhould ſuffer an individual to ſuſtain a loſs in conſequence of any adventure entered into, from ſuch encouragement having been held out. This, he ſaid, he ſtated from the general impreſſion of his mind, not from any particular recollection of what paſſed at the time. He added, That under the anxiety he felt for the Bill being effectual for the attainment of its object, he could have no doubt that he might expreſs to the Petitioners a wiſh that they might find it to their intereſt to contribute to it.

ROBERT MILLIGAN, Eſq. a Weſt India Merchant, was next examined, and ſaid, That he perfectly recollected Salted Herrings were both very ſcarce and dear in the month of November 1800, occaſioned by the dearth of Proviſions, and the ſhort fiſhery; that ſalted fiſh is certainly a material and important article of ſupply for the uſe of the Negroes in the Weſt Indies, and at the period referred to conſiderable apprehenſions were entertained by the Weſt India merchants that the neceſſary ſupply of Britiſh Salted Herrings would not be obtained, and in conſequence of that apprehenſion the Weſt India merchants at that time preſented a Memorial to the Lords of the Treaſury, requeſting to be permitted to import Swediſh Herrings upon the ſame terms as imported into Ireland.

The Witneſs further ſtated, That in the expectation that permiſſion would be given to import Swediſh Herrings, he applied to Meſſrs. Chalmers and Cowie, making a propoſition to take 4 or 5,000 barrels, provided they would engage to ſupply them within two months, and at 30*s.* per barrel; but they declined binding themſelves either as to time or price.

He further ſtated, That he found it a very difficult matter to procure the quantity he wanted, and was obliged to purchaſe 1,000 barrels in London, in March 1801, at the price of 45*s.* per barrel on board; and had Meſſrs. Chalmers and Cowie's Herrings arrived early in the year 1801, he thought they might have ſold the whole quantity at from 25 to 30*s.* per barrel.

ROBERT COWIE, Eſq. being examined, ſaid, That about the 20th of November 1800, he was firſt applied to by Mr. Mackenzie to furniſh information on the ſubject of the Swediſh Herring Fiſhery, who ſtated that his inquiries were in conſequence of the requeſt of ſome Members of the Proviſion Committee of the Honourable Houſe of Commons; that the Witneſs and his partner Mr. Chalmers were requeſted to commit all the neceſſary particulars of the Swediſh Herring Fiſhery to writing, and to point out when and by what means a large quantity might be imported from Sweden for the information of the Proviſion Committee; that he prepared ſuch a plan, and delivered it to Mr. Mackenzie, who tranſmitted it in a letter to Mr. Wilberforce to be laid before the Proviſion Committee; and Mr. Wilberforce in his reply ſtated that he had delivered it to Mr. Roſe, one of the Members of that Committee.

The Witneſs further ſtated, That by Mr. Wilberforce's reply to Mr. Mackenzie's letter, they (Meſſrs. Chalmers and Cowie) were requeſted to come up without delay, and converſe with Mr. Pitt, "who had authorized Mr. Wilberforce to ſay that he ſhould be glad to ſee Mr. Mackenzie and the Swediſh Merchants on the ſubject, and alſo to confer with the Committee."

The Witneſs further ſtated, That he and Mr. Chalmers went up with Mr. Mackenzie the next day to confer with Mr. Pitt, but as he could not be ſeen, Mr. Wilberforce came out from the Committee, and converſed with them a long time on the ſubject; that Mr. Wilberforce made very full and pointed inquiries, and took down the ſubſtance of all their (Meſſrs. Chalmers and Cowie's) replies and obſervations in writing, for the purpoſe of carrying them into the Committee, which he did; and as the information given was material to the object which Government had in view in procuring a large importation of Swediſh Herrings, the Witneſs had the moſt undoubted reaſon to know and believe it was ſo communicated. The reaſons he gave for ſuch knowledge and belief were, firſt, That his information was acted upon immediately after it had been diſcuſſed in the Committee, by His Majeſty's Miniſters bringing in a Bill for the expreſs purpoſe; 2dly. That it appeared by reference to the Minute Book of the Proviſion Committee, N° 3. that on the 28th of November the ſubject was under their immediate conſideration, and perſons were then examined as to the effects likely to be produced on the Home Fiſheries by the free importation of Swediſh Herrings being allowed; various other ſubſequent proceedings were had by the Proviſion Committee on the ſubject of Herrings; and on the 8th of December the Proviſion Committee proceeded to a final diſcuſſion on the ſubject of Herrings, and on the next day, the 9th (Meſſrs. Chalmers and Cowie) were acquainted with the intention of Government to bring in a Bill for the importation of Swediſh Herrings, and on the 12th the Reſolution was agreed to by a Committee of the whole Houſe:

> "That it would be expedient to allow the importation of Swediſh Herrings "duty free."

Mr. Cowie further ſtated, That Mr. Milligan in his own name, and that of Mr. George Hibbert, both eminent Jamaica merchants, applied to Meſſrs. Chalmers and Cowie very frequently on the ſubject, and that they underſtood thoſe gentlemen always to convey the general ſenſe of the Committee of Weſt India Merchants and Planters, and that they (Meſſrs. Chalmers and Cowie) from conferences with the Members of the Proviſion Committee and of the Weſt India merchants, were led to conſider the importation of Swediſh Herrings of very great and urgent importance; that Meſſrs. Milligan and George Hibbert did not apply on behalf of the Weſt India merchants at large, but that he knew, from former experience, that the importation of Swediſh Herrings to the port of London was a deſirable object to the Weſt India merchants.

Mr. Cowie further ſaid, That Meſſrs. Chalmers and Cowie were never at all connected in the importation of Swediſh Herrings before the inſtance in queſtion, but were for many years much in correſpondence with the principal ſhippers of the Article, who were merchants at Gothenburg; and that they (Meſſrs. Chalmers and Cowie) were induced to engage in this importation from the extreme diſtreſs of the Country, and the deſire expreſſed by Government, and by ſeveral Members of the Proviſion

Proviſion Committee, to obtain an importation; alſo the urgent ſolicitations of the Weſt India merchants, and a fair expectation of reaſonable advantage in the employment of their capital.

Mr. Cowie further ſtated, That on the 9th of December he received aſſurances, as before ſtated, that Government had determined to bring in a Bill to allow the free importation of Swediſh Herrings; Mr. Roſe and Mr. Wilberforce both furniſhed him with that information; and that Meſſrs. Chalmers and Cowie, in conſequence of ſuch information, and in confidence of the aſſurance received, immediately diſpatched a Cutter to Gothenburg, with orders to make purchaſes, and continued their advices by the mails to that effect.

That the Witneſs conſidered it important to order the purchaſes without waiting the paſſing of the Act, as every thing depended on ſeaſon; and no time was to be loſt after it was aſcertained that Government felt the importance of the meaſure, and would enable them to act; that the news of the Act of Parliament reaching Sweden would greatly tend to enhance the prices, if all between this country and Sweden had continued peaceable.

The Act of the 41ſt of His Majeſty, cap. 18. which paſſed on the 31ſt December 1800, allowing the importation of Swediſh Herrings duty free, was read.

Mr. Cowie was then further examined; and ſaid, That it was repeatedly expreſſed by Mr. Roſe and Mr. Wilberforce (Members of the Proviſion Committee) before the paſſing of the Act, that no time ſhould be loſt in making arrangements to ſupply the market: He further ſtated, that when the Cutter arrived in Sweden, towards the end of December 1800, the Fiſhing was juſt begun, and rather ſcanty appearances of fiſh, which prevented Meſſrs. Chalmers and Cowie's friends from inſtant purchaſes as the prices were high; but when their ſubſequent advices by the mails reached them, all dated in December, ſtating that veſſels were agreed with, and orders given to diſpatch others to load, they began to execute their orders, and adviſed that they had been complied with under date of the 17th of January 1801 That Meſſrs. Chalmers and Cowie ſecured from 19 to 20,000 barrels of fiſh, and they agreed with various Swediſh captains of veſſels to run over and load the Herrings; and had given orders to charter and ſend Britiſh veſſels from Leith.

The Order of His Majeſty in Council was then produced, and read as follows:

" At the Court at St. James's, the 14th of February 1801.

PRESENT;

" The KING's Moſt Excellent MAJESTY in Council.

" WHEREAS His Majeſty has received advice, that a large number of veſſels " belonging to His Majeſty's ſubjects have been and are detained in the Ports of " Ruſſia, and that the Britiſh ſailors navigating the ſame have been, and now are, " detained as priſoners in different parts of Ruſſia; and alſo, that during the conti- " nuance of thoſe proceedings a confederacy of a hoſtile nature, againſt the juſt " rights and intereſts of His Majeſty and his Dominions, has been entered into " with the Court of S^t^ Peterſburgh by the Courts of Denmark and Sweden re- " ſpectively; His Majeſty, with the advice of His Privy Council, is thereupon " pleaſed to order, as it is hereby ordered, That no ſhips or veſſels belonging to any " of His Majeſty's ſubjects be permitted to enter and clear out for any of the Ports " of Ruſſia, Denmark, or Sweden, until further order: And His Majeſty is further " pleaſed to order, That a General Embargo or Stop be made of all Ruſſian, Daniſh, " and Swediſh ſhips and veſſels whatſoever now within, or which hereafter ſhall come " into any of the Ports, Harbours, or Roads within the United Kingdom of Great " Britain and Ireland; together with all perſons and effects on board the ſaid ſhips " and veſſels, but that the utmoſt care be taken for the preſervation of all and every " part of the cargoes on board any of the ſaid ſhips and veſſels, ſo that no damage " or embezzlement whatever be ſuſtained:

" And

" And the Right honourable the Lords Commiſſioners of His Majeſty's Trea-
" ſury, and the Lords Commiſſioners of the Admiralty, and the Lord Warden of
" the Cinque Ports, are to give the neceſſary directions herein as to them may
" reſpectively appertain.

" W. FAWKENER."

Mr. Cowie further ſtated, That the Embargo, which took place on the 14th of January 1801, in conſequence of the Order produced to the Committee, created an alarming ſenſation, and put an inſtant and total ſtop to Meſſrs. Chalmers and Cowie's operations, of which event they were ſo utterly ignorant and ſo unprepared, that only on the day previous they had written in the fulleſt confidence to their correſpondents at Gothenburg to go on with all poſſible expedition. That, in conſequence of this embargo, they wrote on the next following poſt, that this terrifying meaſure had blaſted all hopes of the importation, and was big with danger to all property; but too ſoon finding they were actually committed to the value and extent mentioned; they by Memorial to His Majeſty in Council, applied for Licences and Protections to the Swediſh ſhips they had engaged in England, and for thoſe adviſed to be ready and loading at Gothenburg; and in confirmation of his ſtatement the Witneſs produced the following Certificate from the Council Office:

" Extract of Council Minute of the 4th February 1801, Read—Petition of
" Meſſrs. Chalmers and Cowie, praying that a Licence may be granted to the
" Swediſh Ship Charlotte, bound from Marlſtrand to this Country, with a cargo
" of Swediſh Herrings.— " Nothing ordered."

" It further appears, that on or about the 11th or 12th of the ſame month of
" February, The ſaid Meſſrs. Chalmers and Cowie preſented another Memorial,
" ſoliciting Licences for various other Swediſh Ships, by name, but as no proceed-
" ings were had thereupon, the ſaid Memorial does not appear entered on the
" Minutes of this Office.

" Council Office, W. Fawkener."
" March 11th 1806."

The Witneſs further ſtated, that there was no permiſſion granted by the Britiſh Government to enable them to import the Herrings. The protecting Licences were refuſed for the ſhips engaged in England; but promiſed, though never actually granted, for thoſe at Gothenburg; from February until the 7th of March they were endeavouring to procure thoſe Licences, when they were informed from the Council Office, that a general Order would appear in the Gazette, permitting all Ruſſian, Swediſh, and Daniſh ſhips to import Proviſions and Naval Stores, and guaranteeing Paſſports to them on their return; but this Order never did appear. That they (Chalmers and Cowie) in conſequence, were forced to ſubmit to the great expence of hiring American ſhips, cleared out for American ports, to import a great part of the Herrings. That Mr. Cowie was informed by Mr. Enos Smith, a junior clerk in the Council Office, that the general Order of Council was to appear in the Gazette, which information was communicated to him by letter. The Order not appearing in the Gazette, he inquired the reaſon of the delay, but does not recollect the reaſon aſſigned. The ſeaſon for diſpoſing of the Herrings however expiring ſo faſt, he deſpaired of receiving the Licences in time to be of any uſe.

Mr. Cowie ſtated to the Committee the names and dates of the arrivals, and the quantities imported by each of the American ſhips engaged to clear out from Sweden, as if for American ports, as follows:

Recapitulatory Account of American Ships, chartered during the Embargo.

		Time of Arrival.
2,206	Barrels in the Betſey, Denſon	4th of May 1801.
400	D° Hannah, Gale	9th 1801.
1,100	D° Hazen, Allen	3d June 1801.
1,600	D° Atlantic, Thompſon	1ſt July 1801.
2,800	D° Hindoſtan, Meyrick	24th July 1801.
2,000	D° Daphne, Cuſhing	27th July 1801.
10,116	Total quantity by American ſhips.	

Mr.

Mr. Cowie further ſaid, That theſe arrivals were not in time for the ſupply of the Poor in this Country. He conſulted with Mr. Colquhoun, and made him a tender of them, but Mr. Colquhoun replied, that the Committee by whom the ſupplies of Herrings for the Metropolis had been and were conducted, had a large quantity of Scotch Herrings on hand; and ſhortly after that Committee diſſolved, as no purchaſes were found any longer neceſſary.

That at the time the Herrings arrived the Weſt India fleets had all ſailed, except a few ſhips that were juſt then leaving the River, when the Betſey, the firſt of Meſſrs. Chalmers and Cowie's ſhips, arrived in the port of London. That they uſed every endeavour to diſpoſe of the Herrings; circulated notices to all the Weſt India merchants, and employed all means by proviſion brokers and wharfingers to that effect. The Witneſs produced to the Committee a copy of the printed notice ſent to the Weſt India merchants on that occaſion, with a liſt of all the Weſt India houſes to which the notice was ſent.

Mr. Cowie further ſtated, That as the enſuing ſeaſon advanced Chalmers and Cowie ſucceeded in getting off 2,556 barrels only; that in conſequence of their not having been able to ſell the Herrings in England, they conſulted with various perſons of experience in this line as to the beſt means of diſpoſing of them, who all agreed that exportation to the Weſt India iſlands was the only practicable mode of diſpoſing of them; and merchants, Weſt India captains, and dealers in ſalt proviſions, were all unanimous in this advice, and Chalmers and Cowie accordingly acted upon it.

That in order to render the Herrings which were not ſold in this Country as productive as poſſible, they were carefully repacked according to the uſual practice of Herrings deſtined for the Weſt Indies, ſhipped in good order, one cargo to Mahon in Italy, and the reſt to all parts of the Weſt India Iſlands, and two large cargoes under an agent of great perſonal experience and influence in moſt of the iſlands (Mr. Arthur Strother; who was examined before the Committee, and his Examination will be found in a ſubſequent part of this Report.)

That the meaſure of ſhipping off the Herrings for ſale on their own account, was the only poſſible advantageous diſpoſition of them, and the reſult ſhews that they thereby yielded above £. 8,600. That Meſſrs. Chalmers and Cowie did not rely altogether on the exertions of their agents in the ſale of the Herrings, but wrote many letters to their friends in the iſlands, procured the moſt reſpectable introduction to other correſpondents, and being then at peace with France, ſent two cargoes to St. Domingo, and had their agents recommended by perſons of authority at Paris to Benezech the Preſect, and to the Aid de Camp of Le Clerc the Commander in Chief; but the ſucceſs in the diſpoſal of the Herrings was very ſlender, and the loſs very great. That the low prices obtained for the Herrings muſt be attributed in general to the glut of Herrings in the Weſt Indies that ſeaſon, the conſequence of the extreme ſcarcity and dearneſs of them in the two preceding ſeaſons, and to the precarioufneſs of this Article itſelf, which renders it difficult to preſerve ſound for any length of time, in hot climates eſpecially.

Mr. Cowie produced an Account of the coſts and charges attending the purchaſes and importation of the Herrings, and of the net proceeds of the ſales, ſo as to ſhew his actual loſs in money; a Copy of which Account your Committe have ſubjoined in an Appendix (No. 1.)

Mr. Cowie ſtated to the Committee, That he had carefully examined the Account produced, and could therefore take upon himſelf to ſtate moſt poſitively that the ſame is correct and true in every particular. The Vouchers, by which the items of the Account produced are eſtabliſhed, Mr. Cowie ſtated to have been produced and delivered with many other Vouchers and Affidavits to the Commiſſioners of the Cuſtoms, when they examined into the facts of this tranſaction during many months, by order of the Lords of the Treaſury, and that the whole were ſent up by the Commiſſioners of Cuſtoms to the Treaſury, with their Report in confirmation of the facts ſtated by Meſſrs. Chalmers and Cowie in their Memorial to the Lords of the Treaſury.

Mr. Cowie then produced a Liſt of the Vouchers he ſtated to be at the Treaſury, a Copy of which Liſt your Committee alſo ſubjoin in an Appendix (No. 2.)

The Witneſs further ſaid, That the Account produced, ſhewing a Loſs of £. 35,035. 18*s*. 9*d* is an account of payments and receipts merely, and does not include any item of intereſt, commiſſion or profit; that Account ſhews the money that they (the Petitioners) have actually diſburſed in this unfortunate importation beyond their receipts for the produce of the ſales: but their Loſs he ſtated to exceed that amount by many thouſands, ariſing from ſo large a capital being locked up now five years, alſo from the returns of the actual ſales in ſome parts of the Weſt Indies not being realized, and from ſome bad debts, ſo that their actual Loſs would be found to exceed £. 50,000.

That in general, £. 10. per cent per annum is reckoned a very moderate return of capital in regular trade, in which caſe, and taking into account bad debts which would have been avoided, and adding many other miſchievous effects of this fatal buſineſs, he could conſcientiouſly ſay, that the capital employed in this tranſaction might, in the ordinary courſe of their mercantile and agency buſineſs, have been increaſed at this period to upwards £. 60,000.

That he (Mr. Cowie) received ſeveral Accounts of ſales effected in the Weſt Indies in 1802, which ſhewed a diſappointment and loſs in part; but till the ſales more generally arrived in 1803, they could not clearly aſcertain the extent of the loſs; thoſe further Accounts which came in that year enabled them to make up an Account in July, and they preſented a Memorial to the Lords of the Treaſury, ſtating the circumſtances of their loſs ſome months afterwards, when they could aſcertain with ſufficient correctneſs that no further returns were to be expected.

Mr. Cowie further ſtated, That his regular and accuſtomed trade and commiſſion buſineſs preſented ſufficient and more certain advantages, but his motives and thoſe of his Partner, were to benefit the Country, to follow up the wiſhes of Government, and open a branch of trade of an important nature, and in a high degree beneficial to the Weſt India colonies, as the repeated memorials and ſolicitations of the Merchants and Planters to Government for many years paſt would fully prove.

He further ſtated, That in communicating the information and plan to Mr. Mackenzie, and in the ſubſequent conferences they had with Mr. Wilberforce, and the information given by them in ſuch conferences, they underſtood they were acting throughout by the wiſh and at the requeſt of the Proviſion Committee, although through the interference of individuals; and the Witneſs gave the following reaſons for ſuch underſtanding,—there was no Swediſh merchant, nor any other perſon who gave information to the Committee but themſelves;—that information was laid before Mr. Roſe and Mr. Pitt, as he was informed by Mr. Wilberforce, and acted upon by Government; ſo that the importation was created by the Act before alluded to.

He alſo ſtated, That from the beginning to the end of the tranſaction, in the meaſures they purſued, they acted in confidence of this underſtanding; they were diſtinctly told by Mr. Roſe, that the prohibition againſt the exportation of Britiſh Herrings would continue in force, ſo that their importation would go to ſupply the Weſt India demand; and they would not have written a letter on the ſubject of the importation, had they not underſtood it was the wiſh and at the deſire of the Proviſion Committee and of the Government, and no other mercantile houſe whatever having acted upon that occaſion but themſelves, renders theirs an unique caſe.

Mr. Cowie further ſtated, That had the paſſing of the Act taken off the prohibition and the diſtreſs of the Country, and the demand for the Weſt India market been previouſly known to him, it was not at all in his contemplation that he ſhould have engaged in the importation, without the communications he had with the Committee, and the deſire expreſſed that he ſhould wait upon Mr. Pitt, who had expreſſed a wiſh to ſee them upon the ſubject. That at the time they engaged in that importation, they had no aſſurance that an embargo would not take place, nothing having paſſed on the ſubject; the embargo was therefore quite unexpected, as the Act for allowing the importation of Swediſh Herrings paſſed on the 31ſt of December 1800, and on the 14th of January following the order for the embargo was iſſued; but during that interval, their property was committed to the extent ſtated. The probability of ſuch an embargo did not enter into their conſideration, at the time of giving their firſt orders.

Being

Being aſked, Whether he received any communication from the Committee, except that the prohibition would be taken off? Mr. Cowie ſaid, That he and his Partner received from the Committee, or Members of the Committee, whoſe names have already been mentioned, the ſtrongeſt encouragements to import, as the diſtreſs at that time was very urgent: that the encouragement held out by thoſe Members was the great demand for the Article, as a meaſure benefiting the Poor, and to ſupply the Weſt India market; and that the prohibition againſt exporting Britiſh Herrings would continue in force.

The Witneſs being aſked if he had received any allowance or compenſation for his loſſes from the Swediſh Government? anſwered, That he had not; nor had he any claim upon that Government, as the ſhips with his property on board were not prevented from ſailing by any act of the Swediſh Government; but the fear of being captured in England had detained them in the Swediſh port.

The Witneſs further ſaid, That he had never before, or ſubſequent to, the importation of the Herrings in queſtion purchaſed goods of any deſcription upon ſpeculation, but that his trade had been ſolely that of a Commiſſion Merchant, except in one inſtance, about 20 years ago, which was a very ſmall purchaſe.

Mr. Cowie added, That having reaſon to believe that an impreſſion prevailed with ſome gentlemen that Mr. Chalmers and himſelf had made their application to Parliament upon the ground of right, he begged to be allowed to ſtate, moſt explicitly for himſelf and Partner, that they never entertained ſuch an idea, nor could they ever conceive the Government, the Proviſion Committee, or any Members thereof, to have given any expreſs pledge to indemnify them againſt loſs; but the ground upon which they humbly ſubmitted their claim was, that their property had been deſtroyed by the embargo which took place only fourteen days after the paſſing of the Act, and it not only did not enter into their contemplation that an embargo would take place to interrupt the importation, but had they ſuppoſed it poſſible, under the degree of encouragement received, that ſuch a meaſure would have been taken, they certainly would not have embarked one ſhilling in the undertaking, unleſs under the expreſs guarantee of Parliament, or Government.

CHARLES CHALMERS, Eſq. the Partner of Mr. Cowie, is a Merchant in London; and, being examined, confirmed the evidence of Mr. Cowie; ſtating himſelf to be well acquainted with all the facts to which Mr. Cowie had been examined, and having been preſent at all the conferences referred to in the evidence of Mr. Cowie.

The Witneſs further ſtated, That he had ſeveral interviews with Mr. Roſe, when his Partner was not preſent, and received upon ſuch interviews the ſtrongeſt encouragement to proceed in the importation of Swediſh Herrings; that the encouragement ſo received went farther than an aſſurance, that the importation of Swediſh Herrings ſhould be allowed; and Mr. Roſe particularly preſſed him to uſe every expedition in the power of himſelf and his Partner, to bring the Herrings to England.

That, in one of the interviews the Witneſs had with Mr. Roſe, he told him, Meſſrs. Chalmers and Cowie had diſpatched a Cutter to Sweden, with orders for the Fiſh; of which Mr. Roſe highly approved, and requeſted the Witneſs and his Partner would uſe every expedition in their power, which would highly benefit the Country at that period; that this latter converſation took place about four or five days after the Cutter had been diſpatched.

The Witneſs further ſaid, That the promiſe ſtated in the evidence of Mr. Cowie, that Licences would be granted for the ſhips engaged by Meſſrs. Chalmers and Cowie in England, was communicated firſt, verbally, by Mr. Enos Smith, one of the Clerks in the Council Office; and then by letter from the ſame clerk, which the Witneſs produced; and alſo by aſſurances to the Witneſs by Mr. Fawkener and Sir Stephen Cottrell:

The following is a copy of the Letter produced by the Witneſs:

"Council Office, Whitehall,
"27th Feb. 1801.

"Sir,

"I HAVE the pleaſure to inform you, that Lord St. Vincent has agreed to "your requeſt, and I ſhall ſet about procuring the Sign Manuals and Duplicates "as faſt as poſſible—The expence altogether will be rather conſiderable, but that "circumſtance is owing to the number of ſhips to be employed upon this "occaſion.

"I am, Sir,
"Your moſt obedient Servant.
Enos Smith."

"Mr. Chalmers,
"50, Lime-ſtreet."

That the aſſurances given by Mr. Fawkener and Sir Stephen Cottrell were, "That their Lordſhips had conſidered the application of the Witneſs and his "Partner, and, from the hardſhip of their caſe, in not being able to get the "cargoes to market, Licences would be granted." The Witneſs ſaid, He had been informed; that the delay reſpecting the Licences had been occaſioned by His Majeſty's then indiſpoſition; but the Witneſs had no reaſon to know why the general Order or Proclamation, ſpoken of in the evidence of Mr. Cowie, did not appear in the Gazette; and he could not recollect whether he had received any information that ſuch Order would apear in the Gazette, except by a letter from Mr. Enos Smith.

Mr. ROBERT GEORGE STEELE, the principal and confidential Clerk of Meſſrs. Chalmers and Cowie, was examined; and ſaid, That he was well acquainted with all the mercantile tranſactions of Meſſrs. Chalmers and Cowie, and with all their operations reſpecting the importation of Swediſh Herrings in 1801; he ſaid, that they had not been engaged in the importation of Herrings before that time.

The Witneſs then confirmed the evidence of Mr. Cowie, as to the dates of the different arrivals of the Herrings in queſtion; the meaſures taken by the Petitioners to effect ſales of the Herrings; and the coſts and charges attending their purchaſe and importation; and alſo the proceeds of the ſales.

THOMAS ROWCROFT, Eſq. a Merchant, and one of the aldermen of the city of London, being examined, ſtated, That he ſaw the Herrings imported by Meſſrs. Chalmers and Cowie, in the year 1801, which, in their original ſtate, were good and merchantable Swediſh Herrings; but when he ſaw them they did not appear to have been freſh, but to have been delayed in the importation; and the Witneſs adviſed their being ſent to the Weſt Indies for ſale, as the only means of making any thing of them, there being no ſale for them in England.

Mr. HENRY ANDERSON, a Dealer in Proviſions, and wharfinger, being examined, ſtated, That he had the charge of the whole 19,500 barrels of Swediſh Herrings, impoſted by Meſſrs. Chalmers and Cowie. He confirmed the evidence of Mr. Cowie, as to the dates of their arrival; the previous ſailing of the ſpring fleets for the Weſt Indies, in 1801; the Fiſh being of a good quality; the endeavours uſed to effect ſales in England; and the meaſures taken to render them fit for exportation.

JOHN FOULLERTON, Eſq. a Merchant in London, and Scotch factor, ſpoke to the ſame facts as Mr. Anderſon. This and the laſt Witneſs agreed, that the conduct purſued by Meſſrs. Chalmers and Cowie, in exporting the Herrings to the Weſt Indies for ſale on their own account, was proper and prudent; and that this was the only meaſure which could have been purſued to avoid a total loſs of the property.

Mr.

Mr. ARTHUR STROTHER, a Merchant in London, being examined, ſaid, That he proceeded to the Weſt Indies, at the requeſt of Meſſrs. Chalmers and Cowie, the beginning of December 1801, as ſupercargo, to effect ſales of a quantity of Swediſh Herrings imported by them. The Witneſs ſtated, in confirmation of Mr. Cowie's evidence, that he had examined the Account of payments and receipts hereto annexed, and marked Appendix (N° 1.) which he ſaid was correct, as far as the part of the Herrings under his management.

The Witneſs further ſtated, That he was alſo in the Weſt Indies in the months of May and June 1801, and that he had the ſtrongeſt reaſon to believe, that, had the Herrings been in the Weſt Indies at that time, they would have ſold exceedingly high, from the obſervations he made on the ſtate of the markets at that period.

The Act of the 41ſt of His Majeſty, cap. 10. (paſſed on the 15th December 1800, was read; by the 3d ſection of which a bounty was ſecured to the importers of Corn, equal to the difference between the market price after arrival and the price mentioned in the Act of Parliament.

The Act of the 41ſt of His Majeſty, cap. 21. (paſſed on the 31ſt December 1800) was alſo read; by the 17th and 18th ſections of which, perſons entitled to a bounty upon exporting Pilchards were allowed to ſell them for home conſumption, and receive the bounty as if they had been exported. By the ſame Act, advantages were alſo held out to perſons engaged, or who ſhould engage, in the Fiſheries at that period.

CLAES GRILL, Eſq. the Conſul General for Sweden, being examined, ſaid, That, in January 1801, he made application, through the Swediſh Ambaſſador, to the Britiſh Government, for allowance for maintenance of the crews of ſuch Swediſh ſhips as were detained by embargo in the ports of Great Britain and Ireland; the Witneſs received from Government, in conſequence of that application, at the rate of 3*s.* 6*d.* per day for each captain, 2*s.* per day for each mate, and 1*s.* 3*d.* per day for each of the remaining part of the crew; amounting in the whole to about £. 24,000.

The Witneſs ſaid, He had every reaſon to believe that a ſimilar application was made, and with ſimilar ſucceſs, on behalf of the Daniſh ſhips detained by the ſame embargo, as the Witneſs was preſent, and attended with Mr. Wolfe, the Daniſh Conſul, upon Mr. Roſe, at the Treaſury, when the allowance to be made was ſettled; and the Witneſs ſaid, he believed the ſum received by Mr. Wolfe was about £. 22,000; this money, he ſaid, was given to afford maintenance to the men during their detention by the embargo.

The Witneſs further ſtated, That he had always looked upon Meſſrs. Chalmers and Cowie as merchants in the commiſſion line; and that he did not know of any inſtance of their buying goods on their own account.

DAVID BRISTOW BAKER, Eſq. a Merchant in London, being examined, ſaid, That he had received ſeveral ſums of money from Mr. J. F. Hage, who was a Commiſſioner on the part of the Daniſh Government, to arrange the outſtanding claims of the Daniſh ſubjects in the Weſt India iſlands upon the Britiſh Government, which ſums were placed in the Witneſs's hands on account of the Daniſh Weſt India Company; and he underſtood the ſums were paid by the Engliſh Government on account of ſhips, or other Daniſh property, detained by Britiſh cruizers. The Witneſs ſaid, he had alſo received ſums on the ſame account for other Daniſh ſubjects, amounting altogether to £. 47,261. And he added that the ſums which he received on behalf of individuals, were to his certain knowledge, as compenſation for loſſes ſuſtained by Daniſh ſubjects, through the embargo and ſeizure of their ſhips and property in the Weſt Indies, under the Order in Council of the 14th January 1801.

ROBERT COWIE, Eſq. being again examined, ſaid, That, as agent for the Swediſh Eaſt India Company, he had received various ſums of money of the Britiſh Government for loſſes ſuſtained by three Swediſh Indiamen, one of which was ſeized at the Cape of Good Hope, another at St. Helena, and a third in the

North Seas, and all brought into Britiſh ports, under the Order in Council of the 14th January 1801: That there had been an allowance made by Government for Swediſh ſailors impreſſed and taken to India; for anchors, ſails, and cables, and a variety of port charges; beſides the maintenance of officers and crews, and the expence of furniſhing great part of one of the crews; the whole amount received by the Witneſs for the three ſhips was about £. 4,200.

The Witneſs requeſted permiſſion to deliver in the following paper, which was accordingly delivered in and read, viz.

"In further proof of remuneration being granted by Government to foreign "ſubjects, for loſſes ſuſtained by them in conſequence of the embargo:

"Chalmers and Cowie beg leave to ſtate, That a King's Warrant was made out "7 December 1804, for £. 5,393. 14*s*. 7*d*. for loſs occaſioned to the owners of the "Swediſh ſhip Active, Oloff Oberg, Maſter, detained at Minorca under the "embargo.

"That a King's Warrant was made out the 19th of the ſame month for "£. 20,119. 4*s*. 11*d*. as compenſation for loſſes to Swediſh ſubjects ſuſtained "under the embargo; this was iſſued to Baron Silverhjelm the Swediſh Ambaſſador.

"and R. Cowie has already proved that he received about £. 4,200 on "account of the Swediſh Eaſt India Company, £. 3,700, whereof was part "of the above £. 20,119. 4*s*. 11*d*.

"That a King's Warrant was iſſued 27th March 1805, for £. 14,366. 4*s*. 6*d*. "for ſimilar purpoſes.

"The above ſums are all diſtinct and ſeparate from the ſums iſſued to Mr. Grill, "the Swediſh Conſul, and Mr. Wolff, the Daniſh Conſul, for maintenance of the "maſters and crews of the veſſels detained in Britiſh ports by the embargo."

Mr. Cowie being aſked from whom he received the information contained in the above paper, ſtated that the information of the firſt and third articles he received from a gentleman in an official ſituation at the Treaſury; the ſecond he knew partly of his own knowledge, and partly from the information of Baron Silverhjelm, and in in fact, received part of that money himſelf, as he had already depoſed.

GEORGE COWIE, Eſq. a Merchant in London, being examined, ſaid, that he had received from the Tranſport Board, in conſequence of an application to the Lords of His Majeſty's Treaſury, the ſubſiſtence money for the maſters and crews of five ſhips detained at Gibraltar during the embargo laid on by His Majeſty's Order in Council of the 14th January 1801, amounting to £. 731. He alſo received for the dock hire of the ſhip Cron Prince Guſtaf Adolph, and for another ſhip, named The Wanſkapon, her full freight, although her cargo of fruit, which was ſold by order of Government, did not produce ſo much as the freight amounted to.

Appendix (No. 1.)

A SCHEDULE of the Coſts and Charges of Nineteen thouſand Five hundred and Seventy-three Barrels of HERRINGS, purchaſed in SWEDEN, and of the Proceeds of the ſame.

		£.	s.	d.
A.	Coſt at Gothenburg of 2,000 barrels, per the Betſey, with all Charges	2,250	—	—
B.	Of 7,311 barrels, purchaſed up by our order, per David Mitchell, of Gothenburg	9,881	10	—
C.	10,262 barrels per Low and Smith of Gothenburg	13,994	17	7
	19,573 barrels.			
D.	Coſt of inſurance premiums on the above quantities from Gothenburg to London	724	7	11
E.	Freights to American ſhips hired during the embargo, on 10,106 barrels of the above quantities, from Gothenburg to London	5,318	11	7
F.	Freights to Swediſh and Engliſh ſhips, after the removal of the embargo, on the remaining 9,467 barrels, from Gothenburg to London	2,415	17	7
G.	Coſt of two cargoes of ſalt from Liverpool, to preſerve and repack the Herrings, with freight and inſurance	695	—	8
H.	Cooperage labour, charges inwards, wharfage, lighterage, and Cuſtom-houſe officers	5,033	18	6
I.	Inſurance from fire £. 69 17 9			
K.	Charges outwards on the quantities ſhipped for ſale, per Wharfinger's account 387 5 7			
	Wilkinſon and Son's accounts, bonds, &c. 126 8 6			
	Searchers fees 245 3 6			
		828	15	4
	Total coſt and charges of thoſe Herrings £.	41,163	19	2

The ſeaſon (which, at the lateſt, is February and March) being entirely loſt, by the detention occaſioned by the embargo, which prevented all Swediſh ſhips from moving, and rendered it impracticable to charter Britiſh ſhips, every meaſure of publicity and induſtry that could be deviſed, when the Herrings ultimately arrived, was adopted (as appears by the circular Letter herewith marked L.) to effect a ſale againſt the next approaching ſeaſon; all that could be effected in that way was the following quantity, as will appear per Voucher marked

		£.	s.	d.
M.	2,556 Barrels ſold, amounting to	4,162	14	3
	this ſum deducted from the coſt of the whole quantity as already ſtated, being	41,162	19	2
	left a Stock of 17,017 barrels, at the coſt price and charges of	37,000	4	11
	Making on an average nearly 44 s. per barrel.			

No further ſales at any price being practicable, in conſequence of the peace, and the plenty and cheapneſs of proviſions, and the ſeaſon

	£. s. d
seaſon for the Britiſh Fiſheries drawing on, no other expedient was left to prevent a total deſtruction of the property but to ſhip theſe Herrings to the *Weſt India Iſlands*, &c. on account of the Proprietors.	
Accordingly the various ſhipments under mentioned took place:	
2,500 - - Barrels, per the Sir Hyde Parker, captain Niven.	
1,700 - - - D° - per Anne - - - - - captain Jackſon.	
4,200 - - Barrels for Barbadoes, and all or any of the other leeward and windward Iſlands, Foreign and Britiſh, under the direction of Mr. Arthur Strother, an Agent of experience and fidelity.	
The freight fixed at the loweſt obtainable rate was 5*s.* per barrel - - £. 1,050 — —	
Primage £. 5. per Cent. - - - 52 10 —	
Cuſtom-houſe charges and lighterage - 31 1 2	
Inſurance on £. 6,500 - - a' £. 2. 10*s.* per cent. and ſtamps - - - - - - - 170 12 6	
	1,304 3 8
150 - - Barrels, per Purſuit, capt. Bonadaile, to Surinam;	
500 - - D° Arethuſa, Allard, to Curaçao;	
220 - - D° Dedalus, Powel,	
300 - - D° Suſpence, Wray, to Antigua;	
300 - - D° Maria, Ferns, to Madeira and Demerara;	
300 - - D° Accompliſhed Quaker, Burdon, for St. Kitt's;	
200 - - D° Juſtina, Rooke, to Martinique;	
In all 1,970 barrels;	
The freight paid whereon was - £. 551 5 —	
Primage - - - - - - - - - 27 11 3	
Shipping charges, fees, &c. - - - 80 2 —	
Inſurance - - - - - - - - - 81 — —	
	739 18 3
That no poſſible opening or method, for their diſpoſal, might be left untried, there was a cargo ſhipped for Port Mahon and Leghorn and Naples, p' the General Moore, captain Worts, 1,100 barrels.	
1,100 - - Barrels.	
Freight, 8*s.* per barrel - - - £. 440 — —	
Primage, 10*s.* per cent. - - - 44 — —	
Shipping Charges - - - - - 38 15 —	
Inſurance on £. 2,000 - - - 65 — —	
	587 15 —
8,220 - - Barrels, in ſuitable quantities, were ſhipped in eighteen different ſhips nearly about the ſame time to the various ports in Jamaica, as freight at moderate rates could be obtained, and ſuch information procured as rendered a ſale probable, giving them alſo every chance of ſale at intermediate ports. See liſt marked N. The amount of freight, charges, and inſurance thereon was -	3,267 8 6
And finally were ſent to St. Domingo (part of the Anne's cargo having been ſold there, at a leſs diſadvantage than in ſome of the other Iſlands) with	

		£. s. d.
	with orders to proceed to Jamaica if no ſale could be made, all the reſidue of the original quantity, increaſed by repackage 383 barrels.	
1,910	Barrels per the Sarah, Lightley.	
	Freight - - - - - - - - - £. 620 15 —	
	Primage - - - - - - - - - - 31 12 —	
	Lighterage, fees, &c. - - - - - 61 13 6	
	Inſurance on £. 4,000 - - - - - 110 — —	
		824 0 6
17,400	Thus the original coſt, and the charges of forwarding to market the quantity unſold, amounts to - - - - - - - - - - - - - - - -	43,723 10 10

The Sales and Proceeds of theſe quantities exported are as follows:

			£. s. d.
O.	Net Proceeds of ſales, per Sir Hyde Parker and Anne - - - -		£. 2,359 4 6
P.	D° per General Moore at Mahon - - - - 135 8 2		
	Leghorn *S/* 3,932 17		
	a ex. 53^{d} - - 868 6 10		
			1,003 15 —
Q.	Net Proceeds of ſales of		
	1,670 barrels, part of the		
	1,970 D° ſent to Surinam, Curaçao, Antigua, &c. -		902 15 9
	N. B. Of the remaining 300 barrels to St. Kitt's no report of ſales can be obtained, nor any remittance.		
R.	D° of 7,920, part of		
	8,220 to Jamaica - - - - - - - - - - -		4,421 16 10
	Total of ſales - - - - -		8,687 12 1
	The reſidue, 300, no report of ſales, nor any remittances has been obtained.		
	By deducting the above Proceeds from the coſt and charges of the Herrings, as above - - - - - - - - - - - - - -		43,723 10 10
	The actual Loſs will be found to amount to £.		35,035 18 9

1,910 barrels, per Sarah, which were ultimately delivered at Jamaica, no poſſibility of ſale being found at St. Domingo, the Charges exceeded the Proceeds per £. 88. 8. 4. See Davies' accounts in the Vouchers under this mark.

Appendix, No. 2.

PARTICULARS and CONTENTS of VOUCHERS.

A. JAMES LYONS Account Current with CHALMERS and COWIE; 12th November 1801.

Letter from Low and Smith, and from D. Mitchell, dated Gothenburgh, 31ſt December 1800; each adviſing the purchaſe of 1,000 barrels, at R. D. $\frac{6}{2}$ 6,000 ex. at 5. 16. £. 1,125. drawn on him, by each Houſe: in all £. 2,250.

Stampt agreement of ſale, J. Lyon to Chalmers & Cowie; dated London, 2d April 1801, at the invoice price.

In virtue of our paying the above bills drawn on him, and all other charges.

The letters or notes from J. Lyon to C. & C. reſpecting the charter of the American ſhip Betſey, Denſon maſter, and the payment of his balance.

B. Letter from D. Mitchell to C. & C. dated Gothenburgh, 21ſt January 1801, adviſing the purchaſe of 8,000 barrels, per £. 9,140. and his having drawn for the ſame.

Account of charges at Gothenburg on the above quantity, amounting to Rx. D. £. 3,597. Exchange a 6. £. 599. 13. 3.

Recapitulation, making the exact coſt with intereſt and poſtages charged in his account current, &c. £. 141. 16. 9.—£. 9,881. 10.

C. Letter from Low and Smith, dated Gothenburgh, 17th and 21ſt January 1801, adviſing purchaſe of 10,000 barrels, at 6 Rix Dollars per barrel, and adviſing their drafts per £. 12,140.

Their account of charges on the above parcel at Gothenburg, dated 25th November 1801, Rix Dollars 4,124. with duplicate in Swediſh annexed, ſigned Laurance, Tarras and Anderſon, and Wolhfart; dated Gothenburg, 29th May 1802, and a tranſlation attached.

Their account current; dated 25th November 1801, making a balance of £. 462. 13. 6. due them.

Recapitulation, making the exact coſt with intereſt and charges, and poſtages charged in ſubſequent account current, £. 432. 19. 9.—£. 13,994. 17. 7.

D. Account of Inſurances effected, ſpecifying the policies in number fourteen, balance £. 724. 7. 11. Witneſſed by W. Dorrington, keeper of the Policy Book for Chalmers and Cowie.

E. Samuel Gale's receipt for freight, £. 220.; 21ſt May 1801.

Henry Anderſon's note of delivery.

Bills of lading per 206 barrels, and 2,000 barrels, per Betſey, Danſon, the laſt indorſed "James Lyon."

W. Beatſon and Co's note of freight and ſettlement thereof, 16th May 1801, per the above Betſey, £. 1,212. 15.

Capt. Danſon's affidavit of delivery.

C. William's note of freight, per Hazen; 10th June 1801, £. 632. 10.

Bill of lading, per 1,100 barrels, per do.

Freight note, per Indoſtan, per 2,800 barrels, amount £. 1,540. 25th Auguſt 1801.

Charterparty, per Atlantic, Thompſon maſter, Liverpool; 30th March 1801.

Lee's and Rundle's account of freight, per Atlantic, and ſettlement thereof, £. 1,598. 12. 1. 3d Auguſt 1801; ſigned Wallis, Cooke, and Hammond.

Freight note, per Daphne, B. Cuſhing, £. 889. 10. 6.; 9th Sept. 1801.

Charter, per ditto; London, 20th April 1801.

Freight

F. Freight note, per Speculation, Timan maſter, 10th Auguſt 1801, 1,623 barrels, £.293. 5. (Signed) Sundius and Dodds.
Bill of lading, per ditto.
Bill of lading, per Charlotte, Andrews maſter, 1,776 barrels, 6th Auguſt 1801.
Freight note, per ditto, £.408. 5. 6.
Freight note, per St. Johannes, Kirchoff maſter, 2d September 1801, 1,276 barrels, £.311. 6. (Signed) Hoffman and De Bie.
Bill of lading, per ditto.
Freight note, per Exchange. Johnſon maſter, 1,176 barrels, £.287. 8.
Bill of lading, per ditto, Gothenburg, 24th Auguſt 1801.
Freight note, per Marguretta, Lamberg maſter, 23d September 1801, 700 barrels. (Signed) Sundius and Dodds.
Bill of lading, per ditto.
Freight note, per Fortuna, Ifvenberg maſter, 25th September 1801, 850 barrels, £.207. 14. 8. (Signed) Sundius and Dodds.
Bill of lading, per ditto.
Freight note, per Maria, Willes maſter, 22d October 1801, 1,250 barrels, £.323. 8. 9. (Signed) Van Bunren and Co.
Bill of lading, per ditto.
Freight account, per Allianſon, Biorkman maſter, 15th October 1801, 1,420 barrels, £.380. 14. (Signed) Sundius and Dodds.
Bill of lading, per ditto.

G. Invoice of 60 tons Salt, per Chance, Bexfield maſter, per Hannay and Logan, dated Liverpool, 17th Auguſt 1801.
Ditto of 100 tons, per Ruth, Pugh maſter, per ditto, Liverpool, 27th October 1801.

H. Account, ſigned Wemyſs and Sherman, coopers, Auguſt 10th, 1801, to 22d May 1802, for remaking and repacking 5,624 barrels, £. 1,178. 13.
Ditto, ditto, 1,913 barrels, at Three Cranes, unheading, fitting up, heading and coopering; ſigned ditto, November and December 1801, April 26th to 30th May 1802; £. 176. 5. 3.
Ditto, ditto, unheading, fitting up, heading and coopering 6,834 barrels, at Hubbert's wharf, Cherry-gardens, 10th October to 26th December 1801; £. 630. 13. 6.
Ditto, ditto, ditto, 1,473 barrels ditto, at ditto, ditto, 21ſt September; reducing and remaking, &c. to 7th November; £. 247.

James Roſe's account: drawing, remaking, repacking 709 barrels, and 570 ditto, landing, wharfage, houſing, ſhipping, &c. £. 331. 13.

Henry Anderſon's account, dated 28th July 1802, of landing, entry, wharfage, lighterage, landwaiters, weighers, watching, and rent of all the cargoes inwards, 19,567 barrels, £. 926. 1. 4. (except the wharfage, &c. of the quantities landed at other wharfs.)
Rowcroft and Wood's account of landing, wharfage, houſing, rent, and ſhipping 8,564 barrels, and charges on ſalt, per the Ruth, £. 37. 9.—£. 665. 17. 4.

George Brown, Chamberlains Wharf, account of wharfage, landing, unpacking, repacking, porterage, rent, and ſhipping 3,264 barrels £. 362. 17. 3.

Turner and Rutherford's account of wharfage and reſhipping 1,418 barrels, £. 59. 1. 8.

T. Bolt, Dice and Smart's Quay, and Trig's Wharfs; accounts of wharfage, landing, houſing, lighterage, ſhipping and rent of 1,100 barrels, £. 127. 11. 11.

J. White, Kennet Wharf; account of landing, wharfage, houſing, rent, and rolling away 1,000 barrels £. 93. 1. 2.
A memorandum ſlip, ſtating the widow Atkinſon and Co. bill of £. 271. 18; for like charges.
Landwaiter's account, fees, &c. on 6,467. barrels, £. 22. 2.

Henry

K. Henry Anderſon's account of charges in ſundry ſhipments,
in all - - 19,304 barrels.
and - - 950 gained by repacking.

20,254 - - - - - - - £. 387 5. 7.

C. and E. Wilkinſon's account inwards £. 22. 8. 6.
Scavage and entries outward - - - - - - - - - - } - - - £. 108. 14. 0.

N. Bills of loading, per the Alert, Captain M^cDonald; Hazard, Cummins; Sarah Ann, Hunter; Alfred, Pariſh; Aurora, Coleman; Arethuſa, Dods; Northumberland, Wake; Lady Andover, Haddon; Cora, Bruton; Montego Bay, Allen; Trelawney Planter, M^cDonald; Viciſſitude, Stout; Latona, M^cGrath; Crown, Proctor; Ann, Atkins; Stranger, Pearce—Jamaica ſhips.

O. Thomas J. Pierce's account ſales of Herrings at Barbadoes (extracted from his general accounts furniſhed) ſigned by him, 1,066 barrels.
Raithby and Moſs's ditto, at St. Vincent's, 400 barrels.
John Brooker ditto, at Anguilla, 100 barrels.
R. S. Turton ditto, at Demarara, 400 barrels.
W. Brown and Co's. ditto, at Trinidad, 300 barrels.
George Robertſon and Co's. ditto, at Surinam, 100 barrels.
John Campbell and Co's. letter from Tobago, 29th November 1802, giving account of the fate of the quantity ſent, 140 barrels.
Arthur Strother's original letter to us, dated Port-au-Prince, St. Domingo, 13th March 1802, adviſing the ſale of the Ann's cargo there.

P. Captain Clement Wort's letter from Leghorn, 12th February 1802, with account ſales of 50 barrels at Mahon.
Dupouy Brother's account ſales, dated Leghorn 13th September 1802, with explanatory note annexed, thus,

Groſs ſales of the within account - - - - - - - -	S.	5,216	13 3
Of all the charges (except the freight already entered in Schedule, p. 4.) - - - - - - - - - - - - -		1,173	11 2
		4,043	2 —
Agio - -		110	4 9
Exch. a. 53 - - is £. 868. 6. 10. - -	St^g S.	3,932	7 3

Q. Theodore Jutting's account, dated Curaçao, 21 April 1802.
Captain Richard Powle's account ſales, Antigua, 12 May 1802, and letters of advice.
Auctioneers account of ſales, dated St. Pierre, Martinique, 7th Auguſt 1802, 300 barrels, per Maria, Ferris.
Captain Rooke's account ſale, 200 barrels, per Juſtina.

Daniel Hill, jun^r and Co's. account ſales, 300 barrels, per the Suſpence, Antigua, 31ſt December 1803, his bill remitted - - - - - - - - - - £. 50 18 9
add freight, which was - - - - - - - - 78 15 —
£. 129 13 9

R. R. Graham's account ſales, per Cora, dated 20th February 1802.
John Mitchell's account ſales, per the Trelawney Planter, Jamaica, 18th March 1803.

Stewart

Stewart Galloway and Co's account ſales, per the Trelawney Planter; dated Jamaica, 1ſt March 1802.

Ditto's account ſales, per Crown, ditto, ditto, ditto.

Ditto's letter of advice, ditto, ditto, ditto.

Captain Robert's account ſales, per Naiad, with abſtract thereof, per Chalmers and Cowie.

Captain M'Grath's account ſales, per Latona, 6th Auguſt 1802.

Alexander Davidſon's account ſales, per Ann, Montego Bay, 31ſt July 1802.

Captain Pariſh's account ſales, per Alfred, Kingſton, 22d June 1802.

Newham's account ſales, and letter of advice, per the Northumberland, Kingſton, 29th May 1802.

G. Johnſon's account ſales, per ditto, Falmouth, 15th October, and letter of advice (with abſtract or ſummary, per Chalmers and Cowie.)

Henry Weſt and Co's account ſales, per Stranger, Kingſton, 4th October 1802.

Captain George Stout's account ſales, per Viciſſitude, 22d December.

Copy, Alexander Langland's account ſales, per ditto, Montego Bay, 8th September 1802 (with ſummary, per Chalmers and Cowie).

Cooke, Reynolds, and Co's. letter of advice and account ſales of part of the Camperdown's cargo, Port Maria, 26th January 1803.

Captain John Hunter's account ſales, per Sarah Ann.

Account Sales, per the Alert, M'Donald, Davis, and Co's account ſales, per Montego Bay, Kingſton, 4th January 1803.

Ditto's account ſales, per Sarah, ditto.

Ditto's account ſales, per Hazard, ditto, with abſtract, per Chalmers and Cowie, adding the freight as being already entered in the Schedule.

R. Newby's account ſales, per Aurora, St. Ann's Bay, 20th March 1803, with account current and certificate.

Beſides all thoſe Accounts and Vouchers containedin the above arrangement, from letter A. to R. there were alſo furniſhed the following; viz.

Bills of loading for the ſhipment of the 1,100 barrels to Mahon and Italy; and for

4,200
1,970 } ditto to Leeward Iſlands.

Bills of lading, per Sarah, 1,910 barrels; and tranſlation of letters of recommendation from Thebaud, a member of the French Government to Citizen Brugure, Aid de Camp to General le Clerc, dated Paris, 7 Prairial, year 8; and from Montze Paris, 22 Prairial, to M. Benezech, colonial Prefect, St. Domingo.

Chalmers and Cowie's inſtructions to Captain Lightley.

IN reply to the firſt application of the Commiſſioners of Cuſtoms for proofs, the following Affidavits were delivered: viz.

of Robert Cowie:

of Henry Anderſon, Wharfinger and Salt Proviſion Broker, who had the ſuperintendance of the Herrings, and certificates to the Accounts, H. K. and M.

Arthur Strother, an Agent and Supercargo, employed in the export and ſale of two large cargoes, and who certifies the Accounts, O.

Robert George Steele, firſt Clerk in the houſe of Meſſrs. Chalmers and Cowie, who certifies all the Accounts in the Appendix, No. 1.

To the above proofs on oath, there were added:

The Bills of lading, accounts ſales, letters of advice, and every other document attaching to the reſpective accounts.

All the above were accompanied by a letter from Meſſrs. Chalmers and Cowie, to the Commiſſioners, dated 31ſt March 1804.

To the ſecond application of the Commiſſioners for further proofs, the following were delivered:

A Liſt of all the ſhips and of their cargoes, from Gothenburg, with the dates of importation, and this document confirmed by a Report annexed from the Land Surveyor at the Cuſtom-houſe.

To the third application of the Commiſſioners of Cuſtoms for further proofs, the following were delivered:

The Affidavit of JOHN BENNETT, of Lloyd's Coffee-houſe, ſtating the time when the Weſt-India fleets ſailed.

Affidavit of HENRY ANDERSON, as to the impracticability of ſhipping the Herrings in the early part of the year 1801, and to the offer of ſelling them under the market price, and to the other meaſures taken to diſpoſe of them.

Affidavit of LAURENCE BRUCE, as to the Herrings being merchantable, and the neceſſity of their being repacked.

Affidavit of JOHN FOULLERTON, Eſq; to the like effect, and as to the cauſes which prevented the ſale.

Letter from ROBERT MILLIGAN, Eſq. confirming all the allegations in Meſſrs. Chalmers and Cowie's memorial to the Treaſury.

The above were alſo accompanied by a letter from Chalmers and Cowie, dated 30th June 1804, to the Commiſſioners.

REPORT

FROM

Select Committee on South Devon Fisheries.

Ordered, by The House of Commons, *to be Printed*, 20 *June* 1817.

THE SELECT COMMITTEE appointed to consider the present state and condition of the FISHERIES on the South Coast of the County of *Devon*, and to report the same, with their Observations thereupon, to The House, together with the MINUTES OF THE EVIDENCE taken before Them;—HAVE, pursuant to the Order of The House, considered the Matters to them referred; and have agreed to the following REPORT:

YOUR Committee have met and examined Witnesses on the Matters referred to them; and after consideration of the Evidence produced, they think it has been clearly made out, that although in the reign of James the First the attention of the Legislature was particularly drawn to the preservation of the Spawn of Sea-fish, and attempts have been since made by subsequent Enactments to preserve the Fisheries on our Coasts; yet it appears to your Committee, that much is yet left to be done, and particularly with regard to that part of the Coast, which has been more immediately referred to their consideration.

Your Committee are of opinion, that it will conduce to the benefit both of the Public and of the Fishermen themselves, if Start Bay, Torbay, and Exmouth Bay, or the southern coast of Devonshire, are kept free from trawl and shore drag nets during the spawning season; and they are the more induced to recommend some regulations to that effect, as it has been clearly shown, that it will not throw any Fishermen out of employment during those months, and will be the means of increasing the quantity of a cheap and nutritious food, on which all the lower ranks of society in that part of the country chiefly subsist.

Your Committee also find, that the baskets in which lobsters and crabs are caught, as well as nets and lines set to take Fish, may be plundered with impunity (the owner of the basket, net or line, not having had the fish in his possession, being without any legal remedy at present against a robber); they would recommend some regulations for the protection of these, as well as every other description of Fishing Craft.

It also appears to Your Committee, that a reduction may be made in the size of the mesh of nets with advantage to the Fisheries, particularly if the Fish are protected during the breeding season, as before recommended.

20 *June* 1817.

MINUTES OF EVIDENCE.

ARTHUR HOWE HOLDSWORTH, Esquire, in the Chair.

Jovis, 19° die Junij, 1817.

The Honourable *George Vernon*, called in; and Examined.

The Hon. George Vernon.

YOU have been some time residing on the coast of Torbay?—I have, ten or twelve years.

Have you, during that time, been in the habit of fishing a great deal on the coast, and seeing those who make it their profession?—I have taken a great deal of pains to inquire into the nature of it.

In consequence of a supposed decrease in the quantity of fish on the coast, there have been meetings held by the fishermen of Torbay and Start Bay, as to the better mode of preserving those fisheries?—There have.

Have you been in the habit of attending those meetings?—I have.

Will you have the goodness to give the Committee the result of the opinion of the fishermen generally at those meetings?—The result of those consultations was, that it was the general opinion of the fishermen, that nothing would be so likely to restore the state of the fisheries as shutting up the bays upon the coast from trawls and shore drag nets for certain months in the year, during the spawning season; in confirmation of which I beg to give in the following statement, signed by fifty-five of the parties interested:—

"Birxham Quay (Torbay) June 11th, 1817.

"We, the undersigned, being persons concerned and interested in the fisheries between the Start and Exmouth Bay, do hereby declare our opinion, that it will materially promote and benefit the said fisheries, if trawls and drag nets are prohibited being used in Torbay from the first day of May to the first day of November, and in Start Bay and Teignmouth Bay from the first day of May to the first of October."

I also beg to state, that there are four distinct classes or descriptions of fishermen, whose interests will be more or less benefited by the proposed interference of Parliament; first, the trawlers; secondly, the shore drag net fishermen; thirdly, the herring, pilchard, and mackarel fishermen; fourthly, the crab and lobster fishermen; and a fifth may be added (although not perhaps to be considered as regular fishermen) namely, such of the poorer classes as subsist occasionally by hook fishing, and that chiefly in Torbay. The most important object to be attained is, the exclusion of trawls and shore drag nets from bays during the months of May, June, July, August, September, and, in Torbay, October. This is a proposition emanating directly from the trawlers themselves, the largest and most important class; it has the consent and concurrence of a very considerable majority of the shore drag net fishermen, and it is the general wish and desire of all persons, without exception, who are concerned in the herring, pilchard, and mackarel fisheries, as well as of the small hookers; for all classes cannot fail of deriving immediate and effectual support and protection from it. As to the shore drag nets in Torbay, and to the eastward, there are none; and in Start Bay they have all, with the exception of one or at most of two gangs, voluntarily agreed to give up their drag nets for the period alluded to; and they have done so, for these reasons:—one is, that the spawn and brood of fish may no longer be destroyed as heretofore; another is, that they themselves may be enabled to pursue, with less interruption, their herring, pilchard, and mackarel fisheries. There is at present scarcely a trawl or shore drag net on any part of the coast which is of the legal mesh; and the quantity of fish under the legal size, which is brought ashore, infinitely exceeds the quantity which is of the legal size. After several meetings and consultations last year of the fishermen in Torbay and Start Bay, not only of their acting committees, but of the body in general, it was last year almost unanimously determined by them, in consequence of the progressively rapid decay of the fisheries, to measure the mesh of every trawl or shore drag net which should be found fishing within certain limits,

The Hon. George Vernon.

limits, from the first of July to the first of October, as the only mode of effecting that which is now sought to be obtained by the interference of Parliament. I have no hesitation in stating, that the greatest advantages will result to the pilchard fishery in all the bays, if the proposed regulations can be adopted. The great havoc of fry and small fish which took place in Torbay during the first week in October last year, can be easily conceived, when it is stated, that the greater part of the fish which frequent the bays during summer, are female fish, full of spawn. This circumstance so convinced the trawlers of the good effect of abstaining from trawling there during the Summer months, that they became extremely desirous to extend the time in that bay for a month longer than in the others. I have been myself witness to the unspeakable destruction of the spawn which has of late years taken place during the summer months, by trawls and drag nets in the bays alluded to. I am also prepared to say, that many kinds of fish have become much more scarce, even within the last ten or twelve years; and that it is much later than formerly that the fish approach the shore in the Spring. The several statutes of 3 Jac. I. cap. 12, of 13 and 14 Chas. II. cap. 28, and of Geo. I. stat. 2, cap. 18, will show (and especially the former) what importance was attached by the Legislature in those days, to the preservation of the spawn and brood of fish within a certain distance of all breeding places, and at all seasons of the year; but these Acts are inefficient.

Are those months you have mentioned a very busy time with the herring, pilchard and mackarel fishermen, or would they be thrown out of employment by the stopping their trawls and shore drag nets?—No.

Is there great call for the employment of the fishermen in other parts of the fishery?—As to the trawlers, they pursue their business throughout the year, but at a greater distance from the shore. With regard to the shore drag net men, they would be employed in catching other sorts of fish with other nets as well as by hooking, neither of which are destructive to the spawn, and which fully occupies their time.

You have mentioned, that Parliamentary interference will be of consequence to the lobster and crab fisheries; state in what way?—By affording them protection from depredation. At present, there are no means of punishing any person who takes up the baskets of another person in which the lobsters are caught; but taking up the baskets in which they are stored after they are caught, is, I believe, punishable by a very heavy penalty. The same protection ought to be afforded to other kinds of fishing craft, in which are fish that have not been taken possession of by the owner.

What do you mean by that expression, "fishing craft?"—I mean drift nets, long lines set with hooks, drift-nets for herrings, pilchards, mackarel and other fish.

Are you of opinion, that the preventing the trawlers from fishing in the bays above-mentioned, during the Summer months, will have the effect of driving them to other parts of the coast, than those which they are now in the habit of frequenting?—I do not think there is the slightest ground for supposing it.

Where then will they fish?—Where they chiefly do at present, on the outside of the bays.

It will not oblige them to go off the coast of Cornwall?—Not more than they have been always accustomed to, because that part of the coast, from which it is so proposed to exclude them during certain months, forms but a very inconsiderable part of their fishing ground.

You have mentioned meetings of the committee of fishermen; was any resolution adopted at any meeting of that committee?—Yes, there was; of which the following is a copy:

"Brixham, June 17th, 1816.

"At a Meeting of the Committee of the Brixham Fishery Society, the following resolution was entered into:—

"Notice is hereby given, That from and after the first day of July until the first day of October, in the present year, and from and after the first day of April until the first day of October in the next year, and all succeeding years, any person or persons that shall be found trawling in any vessel or boat, or hauling a drag net on shore, in which trawl or drag net there shall be any meshes of a less size than three inches (that is to say) one inch and a half from knot to knot, if within a line drawn from the Start to Dartmouth Mew Stone, within the Skerries in Start Bay, or within a line drawn from Berry Head to Bob's Nose, in Torbay, they will be proceeded against according to law."

At same time it was unanimously agreed, that any person who shall give the first

The Hon. George Vernon.

information, on conviction of the offender, shall receive from this Society one guinea reward.

(By order of the Committee)

Caleb C. Collier,
Secretary to the Committee of the Brixham Fishing Club.

Were those meetings attended by all the fishermen?—They were public meetings, regularly convened, not only of their committees, but of the body of fishermen in general.

Was there any difference of opinion at those meetings?—There were two or three who were averse to the measure, but a very considerable majority in favour of it.

Did they state any fair or reasonable ground for their objection?—None whatever; and the names of two of those who objected, are now attached to the statement I have given in..

Are the trawlers ever in the habit of fishing in the bays on the coast of Cornwall?—Not that I ever heard of.

Are they not in the habit of occasionally going there?—Very much in the Spring, for the purpose of buying mackarel.

Where do they carry that fish?—They buy it in Mount's Bay, and carry it to Portsmouth for the London market.

What markets are the Brixham fishermen in the habit of chiefly of supplying?—Exeter, Bath, Salisbury and the adjacent country, and Portsmouth and London occasionally.

Have you any idea of the number of men employed in the trawling fishery at Brixham only?—I believe four or five hundred, men and boys, and about a hundred vessels; and, as far as my information goes, I believe there are between one and two hundred persons employed in the drag net fishery in Start Bay, who chiefly supply the interior of that part of the country.

In the statement you have made, you say that there is scarcely a trawl or shore drag net on any part of the coast which is of the legal size mesh, and that the quantity of fish under the legal size, which is brought on shore, infinitely exceeds the quantity which is of the legal size; you stated also, that in consequence of the decay of the fisheries, the fishermen in the two principal bays last year came to resolutions to measure the meshes of the nets used by every trawl or shore drag net fisherman, which should be found within certain limits, during certain months; were those resolutions put in force?—Yes.

Were they effectual in securing the object the fishermen had in view?—They were, to a certain degree, during that year, in consequence of individual exertions.

Do you consider the laws under which they then acted, sufficient for the protection of the fisheries?—Certainly not.

What are your reasons for forming that opinion?—My reasons for forming that opinion are these; that the only way of excluding trawls and shore drag nets from the bays, being by enforcing the Act as to the size of the mesh; some of the fishermen provide themselves with the legal mesh for the purpose of evading the penalty; but the object being to prevent the ground in the bays from being disturbed by any kind of net whatsoever, the legal mesh would do nearly as much mischief as an illegal one.

Are the fish in the habit of coming into those bays to spawn; and is it for the protection of those fish that the measure is principally intended?—Yes; it is both for the protection of breeding fish and of their spawn when deposited on the ground.

Then the Committee are to understand, that it is a matter of great consequence to the supply of fish, that that spawn so deposited should be left undisturbed, until the young fry have attained a certain degree of maturity?—I consider that as a point of the first importance.

Have you ever yourself witnessed the destruction of the spawn in the way you have mentioned?—Yes, I have, very frequently.

Are you of opinion, that any alteration should be made in the law for regulating the size of the meshes of the nets that are used?—It certainly would be much better to allow a reduced scale of mesh, because I think in that case, the regulation would be more strictly enforced and attended to.

Have you had any communication from any part of the coast on that subject?—I have; I beg to give in the following letter from the committee of fishermen, at Torbay, signed by their secretary, in which I fully coincide.

[It

[It was read.]

The Hon. George Vernon.

" To the Honourable George Vernon.

" Sir, Brixham, June 8th, 1817.

In answer to your favour of the 6th instant, I am directed by the fishermen to reply to your various questions.

1st. If the mesh can be reduced, the fishermen would prefer having a three inch, because the net is so much stronger, and oftentimes the fish (particularly soles) shove their heads through the mesh, and frequently quantities of them through this are quite unsaleable.

2d. If the mesh cannot be reduced to three inches, it would be desirable to have it at three inches and a quarter (saying nothing about its being measured wet or dry).

3d. It is the general wish that the old way should be continued as to the measurement of nets (for example), one inch and three-eighths of an inch from knot to knot will make a mesh of three inches and a quarter; one inch and a quarter from knot to knot will make a mesh of three inches.

4th. It is deemed highly necessary that the opening of Start Bay should be in October, and Torbay in November; and that it will be of general advantage to the fishermen of this neighbourhood.

5th. It is agreed that the sizes of fish (say) turbot 14 inches, bret 12, plaice and flounder 7, and dabs 5, are to be measured from the eyes to the utmost extent of the tail (as by the present Act).

Lastly. It is a general opinion, that the principal thing for the preservation of the fishery, is the shutting up and opening the bays in certain portions of the year.

The fishermen beg leave (with the utmost deference) to leave the case in your hands; and any thing they have omitted, they trust your very superior judgment will supply, and they will be fully satisfied therewith, well knowing that every thing in your power will be done for their protection and encouragement.

I have the honour to subscribe myself (on their behalf)

Honourable Sir,

Your very obedient and and humble Servant,

Caleb Clement Collier."

Are you of opinion that the present laws for regulating the size of the fish caught should be altered?—I am.

State in what way?—I think the size stated by the letter from the committee of Torbay fishermen should be allowed.

Do not the poor on the southern coast of Devonshire subsist chiefly on fish?—Almost entirely.

Then the proposed regulation of shutting up the bays during certain months in the year would increase the quantity of fish?—No doubt it would.

Then the poor would get it cheaper?—Of course they would; besides which they would be able to catch more themselves than they do now.

Are you aware that the poorer description of hook fishermen were benefited by the measure adopted last year by the fisheries in general, for the protection of the fish?—They certainly were.

Have you any further statement you wish to make?—I wish to propose that some measure should be adopted for the better protection of boats, nets, lines, &c. and for preventing the fishermen from wilfully injuring each other.

What is the nature of the injury to which you allude?—The fishermen are sometimes in the habit of cutting away or setting adrift the craft belonging to other men, when in their way; for which offence the law provides no remedy, that I am aware of.

John Tilley and *Thomas Rackley*, called in; and Examined.

John Tilley and Thomas Rackley.

[*To Tilley.*]—WHERE do you live?—At Brixham.
What profession are you?—A fisherman.
Have you served your time of apprenticeship to it?—Yes.
How many years?—Five.
How long have you been a fisherman?—Ever since I was eleven years old.
The Committee understand you were brought up in a trawling vessel?—Yes.

[*To Rackley.*]—Where do you live?—At Brixham.
What profession are you?—A fisherman.
Have you served your time of apprenticeship to it?—I served ten years to it.
How long have you been a fisherman?—Twenty-seven years.
Were you brought up in a trawling vessel?—I was.

[The Evidence of the Honourable George Vernon was then read over.]

[*To Tilley.*]—You have distinctly heard what has been read over; and with regard to all that part which concerns the mode of fishing, and the regulations of fishing, do you agree?—Yes.

You state that you have been in the trade ever since you were eleven years old; do you ever remember to have been trawling in any bay on the coast of Cornwall?—No.

Do you ever remember to have seen any other vessels trawling there belonging to Brixham?—No.

Have you ever been in Mount's Bay?—Never.

Supposing the trawlers are excluded from the months of May to October, from fishing in Start Bay, Torbay, and Teignmouth Bays, where will they trawl?—Outside the head lands.

They would not, on that account, go down to the coast of Cornwall to fish?—No.

Where is the principal fishing ground used by the Torbay trawlers?—From Portland on the east to nearly the Start on the west.

What is the greatest distance they ever trawl from the shore?—Nearly out of sight of land.

How far from the shore do you imagine that to be?—From six to eight leagues.

Have you seen much destruction to the spawn in trawling during the Summer months?—Yes, a great deal.

In hauling up the trawls, is there much spawn found in them?—The meshes are sometimes nearly full; the meshes are sometimes like a glass window.

Have you been in the habit of hearing the fishermen say, and have you noticed also from your own observation, that fish are more scarce within these few years than they used to be?—They get scarcer every year.

Do you know any cause for that, but destroying the spawn in the bay?—Not any.

Do you believe it to have arisen from the destruction of the spawn?—Yes.

[*To Rackley.*]—Do you agree in the evidence you have heard read?—I do.

You have been twenty-seven years a fisherman?—Yes.

How many trawling vessels do you imagine there are at Brixham?—About 80 sloops altogether.

How many small ones?—There are about 30 yawls.

How many other small vessels?—About 40.

Are you of opinion that there are upwards of 500 persons employed in all the fisheries there?—Yes.

Do you remember ever to have been fishing in any bay on the coast of Cornwall?—Never in any bay on the coast.

You have been in Mount's Bay?—Yes, after mackarel.

To catch or buy?—To buy mackarel.

What have you done with the fish when so bought?—Carried them to Portsmouth for the London market.

Is that a common practice with the Brixham fishermen?—Every mackerel season.

Are you aware that the quantity of fish in the neighbourhood of Torbay has of late years decreased?—Yes.

To

John Tilley and Thomas Rackley, Esqs.

To what cause do you attribute that?—I think it is by destroying the spawn in the bays.

You know that the flat fish are in the habit of coming into Torbay and spawning?—Yes.

How do you know that?—I know it by catching the fish and the spawn.

Then you, from habit, know a fish that comes in to spawn from another?—Yes.

If you were to take the fish so caught to the shore, would the persons at Brixham who bought their fish from you know it also?—Yes, particularly soles.

Did you fish in Torbay in the first week of last October?—Yes.

What did you observe as to the sort of fish you caught?—There were thousands of baskets of small fish taken and destroyed.

Did you ever see so many small fish in Torbay at that season?—No.

To what do you attribute so large a quantity this last year?—By reason of preventing the vessels from coming in to fish, and thereby destroying the spawn.

Is it your opinion, if the vessels had not come into the bay till November, that those small fish would have been destroyed?—No.

Would they have gone into deeper water?—They would.

There was an understanding among the fishermen last year not to trawl, in Torbay during the Summer months?—Yes.

And you are clearly of opinion as to the good effect it produced, as to saving the fish?—Yes.

The CHAIRMAN of the Committee, made the following STATEMENT:

A. H. Holdsworth, Esq.

I reside in Start Bay, and have been in the habit of seeing the fishermen all my life, and have every reason to believe that the statements made by the witnesses who have been examined are perfectly correct. I conceive there are in that bay two hundred people employed on the shore fishery; and I have reason to believe, from what I have heard from the fishermen themselves, that there are parts of that bay in which the fish are in the habit of taking shelter and depositing their spawn; and I have no doubt, that if the regulations which were voluntarily entered into last year, were confirmed by Act of Parliament, and that, during the months before stated, both the shore fishermen of that bay, as well as the trawlers, were prevented from disturbing the spawn, it would be of general benefit to the country. I have also heard it stated by the fishermen, that they considered that it was owing to the exclusion of the trawlers that the pilchards were more plenty last year than they had been for many years. I particularly mention pilchards, as the fishermen are in the habit of salting and selling them, and thus affording during winter food for a very extensive population. I do not imagine that those regulations would throw any man out of employment during those months, as they are then occupied in fisheries of a different description. From acting as a magistrate, I am fully aware of the difficulty of preserving the fisheries by the Acts at present existing, circumstances having come before me in that capacity, which would fully confirm me in this assertion. With regard to what has been stated by the first witness, respecting the want of protection in the lobster fishery, I remember to have heard that a person was detected in a theft of that nature; but the lobsters not having been in the possession of the fisherman to whom the basket belonged, they were not deemed that description of property to bring him within the reach of the law.

REPORT

FROM

SELECT COMMITTEE ON SOUTH DEVON FISHERIES;

WITH

The Minutes of Evidence taken before Them.

Ordered, by The House of Commons, *to be Printed,*
20 *June* 1817.

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REPORT

FROM THE

SELECT COMMITTEE

ON THE

SALMON FISHERIES

OF THE UNITED KINGDOM.

Ordered, by The House of Commons, *to be Printed,*
17 *June* 1824.

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REPORT.

THE SELECT COMMITTEE appointed to take into consideration the State of the SALMON FISHERIES of *Scotland* and of the United Kingdom, and the Laws affecting the same; and to report the MINUTES of the EVIDENCE, with their opinion and observations thereupon, from time to time, to The House;—HAVE, pursuant to the order of The House, considered the same accordingly, and agreed to the following REPORT:

YOUR Committee have endeavoured to commence the investigation of the extensive and important subject committed to them, by taking such steps as have appeared best calculated to bring before them information on the various branches of the inquiry, from all parts of the United Kingdom, and from the numerous interests which are involved in the Salmon Fisheries. They accordingly, in the first place, prepared certain Queries, which they have distributed most extensively, desiring to have answers returned which should comprise statements of fact and of opinion, not for the purpose of adopting such answers as evidence, but of judging on what points there might be a general coincidence of opinion, and what branches of the subject might require detailed investigation, in order, amid conflicting statements, to ascertain the truth.

To receive such answers to these queries generally and extensively, from England, Scotland, and Ireland, necessarily employed the elapse of a considerable period, and Your Committee have found it impossible during the present Session, to enter upon evidence suggested by an inspection of the answers to the queries issued, the more especially as it seemed most important to proceed with caution and due consideration, so that while the subject should ultimately be thoroughly investigated, it might not, through precipitate and ill advised proceedings, be loaded with unimportant matter, and be extended to an undue magnitude.

At the same time it did appear to Your Committee, to be desirable to open the subject in the present Session, to take such evidence as they could immediately command, and to report to the House a body of information which might serve to attract attention, and lead individuals of intelligence to examine, and subsequently subject it to the test of dispassionate consideration and further inquiry; with this intention, and considering that the Committee, in a great degree, originated from

from numerous petitions presented to the House from Scotland, Your Committee have chiefly examined witnesses connected with the northern part of the empire, availing themselves of the knowledge of these witnesses to the full extent of their opportunities of information. They trust the progress they have made in the inquiry, may appear at once to deserve attention, and to show the propriety of examining the subject in the fullest manner.

In reporting the Evidence, already obtained, to the House, Your Committee are of opinion, that they ought to abstain from all comment upon it; and they report it, not as being in itself complete, in reference even to the parts of the country to which it relates, but as laying the foundation of a further inquiry, which they trust the House will judge it to be expedient to institute at an early period of the next Session of Parliament.

17 *June* 1824

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N° 5.—DRAWING of a STAGE Net.

Appendix, N° 1.

QUERIES, circulated by the Committee, respecting the Salmon Fisheries.

IT is requested, that a direct and concise Answer may be affixed to each of the subjoined Queries, the name of the river, lake or estuary to which they are applicable being inserted in the blank left for that purpose; and that the Queries, with the Answers, may be returned with all convenient dispatch, the parties making the Answer affixing their names and places of residence.—The Cover containing the Queries to be addressed—

" *Salmon Fisheries.*"
" T. F. KENNEDY, Esq.
" Chairman of the Committee on the Salmon Fisheries,
" House of Commons, London."

1.—HAS the Salmon Fishery, in the river lakes or estuary connected therewith, decreased?

2.—IF it has decreased, since what time has it so decreased?

3.—HAS it decreased generally, or in particular parts of the river lakes or estuary; and if in particular parts, in what parts?

4.—DOES the Salmon Fishery exist both in the fresh water and in the tideway of the river or lakes or estuary?

5.—DOES a Salmon Fishery exist in the sea adjacent to the river and at what distance therefrom.

6.—WHAT are the comparative values of the Salmon Fisheries in the different parts of the river lakes, estuary and sea adjacent, now or at any previous time?

7.—IF a decrease in the Salmon Fishery has taken place, to what causes is such decrease, either general or with reference to particular seasons, to be ascribed?

8.—IS there any local Act of Parliament, regulating the Salmon Fishery, applicable to the river lakes or estuary, and what is its date?

9.—ARE there any usages or regulations acted on, or applicable to, the Salmon Fisheries, in the river lakes or estuary, besides the statute law?

10.—DO any practices prevail which are injurious to the Salmon Fishery, and for which the law does not provide a remedy?

11.—IS the law enforced, and to what extent?

12.—IS there any obstacle to the enforcement of the existing law?

13.—WHAT are the modes of Salmon Fishing which have been, or are now, in use in the river lake, estuary or sea adjoining?

14.—ARE such modes of Salmon Fishing authorized by law, or are any of them deemed to be illegal?

15.—DO any such modes of Salmon Fishing tend to the undue destruction of Salmon, or of the Salmon Fry?

16.—ARE there any, and what, improvements in the modes of Salmon Fishing, which might be established in the river lakes, estuary or sea?

17.—BY what modes of Salmon Fishing can the greatest quantity of Salmon fit for market be permanently supplied?

18.—WHAT is the actual day on which the Salmon Fishery commences, and ceases, in each year, in each Fishery, in the river lakes, estuary or sea?

19.—AT what period of the year ought the Salmon Fishery to commence, and cease, in the river lakes, estuary or sea adjoining; with the view of obtaining the greatest supply of Salmon of good quality, and preserving most effectually the breed?

20.—DO the interests of different Salmon Fisheries, in the same river, lakes, estuary or sea, vary as to the season at which the Salmon Fishery ought to commence, and cease?

21.—IF they vary, can the interests of the different Salmon Fisheries be reconciled, and how?

22.—IS there any difference in the quality of the Salmon taken at different parts of the same river, or in the lakes, estuary or sea?

23.—BY what regulations can the safety of the parent Fish, during the breeding season, be best provided for?

24.—BY what regulations can the Spawn be best protected?

25.—BY what regulations can the Salmon Fry be best protected, until they reach the sea?

26.—ARE there any natural or accidental causes, artificial works, mines, or manufactories, which tend to prevent the propagation of the Salmon, and their free passage to and from the sea?

27.—IF there be, what are they, and how far might they be removed, diminished or regulated?

Appendix, N° 2.

MINUTES OF EVIDENCE.

Mercurii, 5° die Maij, 1824.

THOMAS FRANCIS KENNEDY, ESQUIRE,

IN THE CHAIR.

Mr. *John Wilson*,

Called in; and Examined.

Mr. John Wilson.

(May 5.)

DO you reside at Berwick?—Yes.

Are you engaged at all in the salmon fisheries of the Tweed?—Yes, I am.

Will you be so good as state to the Committee, what opportunity you have of possessing knowledge respecting the salmon fishery?—I am proprietor on the Tweed, and also a partner in a large company that are tenants of salmon fisheries.

At what part of the river?—About six or seven miles up the river; from the mouth of the river seven miles upwards.

Do you mean to be understood that you are tenant or proprietor for the whole extent of seven miles?—I am tenant upon different parts of those seven miles; the rental of those seven miles is worth about 9,000*l.* and we are tenants for about 5,000*l.*; my own property lies within that distance.

You mentioned that you also had property in a salmon fishery on the Tweed; in what part of the river is that?—It is about five miles up the river, in Scotland.

Of what value do you consider the fishery, of which you are proprietor?—Just now I have 185*l.* a-year from it.

Has the salmon fishery, in the course of your experience in the river Tweed, decreased?—It has decreased very much within the last three years.

Had it decreased previously to that period?—Yes, it had.

Be so good as state the progressive decrease during the course of your experience?—For the last twenty-nine years the average fishing would be about 8,000 boxes of salmon annually.

Having stated the average fishing, be so good as state the annual value of the fishery during those years?—I cannot state the annual value of the fishery, but I can state the number of fish sent away during those years; I have a written statement of the number of boxes sent away during the last twenty-nine years, which I will deliver in.

[*The Witness delivered in the same, which was read as follows:*]

" Produce River Tweed from 1796.

		Boxes.	Ha's
1796	Boxes Salmon Trout and Gilse - - -	9,338	1
1797	D° - - - d° - - - - -	12,665	1
1798	D° - - - d° - - - - -	12,731	2
1799	D° - - - d° - - - - -	12,437	1
1800	D° - - - d° - - - - -	9,489	2
1801	D° - - - d° - - - - -	13,189	1
1802	D° - - - d° - - - - -	10,029	
1803	D° - - - d° - - - - -	8,056	1

Mr. John Wilson.

(May 5.)

		Boxes.	Ha's.
1804	Boxes Salmon Trout and Gilse - - -	8,741	1
1805	D° - - - d° - - - - -	6,883	1
1806	D° - - - d° - - - - -	6,404	
1807	D° - - - d° - - - - -	9,410	1
1808	D° - - - d° - - - - -	7,380	
1809	D° - - - d° - - - - -	5,952	1
1810	D° - - - d° - - - - -	6,462	1
1811	D° - - - d° - - - - -	6,451	
1812	D° - - - d° - - - - -	8,125	
1813	D° - - - d° - - - - -	7,122	1
1814	D° - - - d° - - - - -	9,793	
1815	D° - - - d° - - - - -	9,382	
1816	D° - - - d° - - - - -	11,471	
1817	D° - - - d° - - - - -	6,191	1
1818	D° - - - d° - - - - -	6,408	
1819	D° - - - d° - - - - -	5,850	
1820	D° - - - d° - - - - -	8,189	
1821	D° - - - d° - - - - -	5,503	
1822	D° - - - d° - - - - -	4,687	1
1823	D° - - - d° - - - - -	4,083	1

Does the paper which you have delivered in, apply to the fisheries of which you have stated that you were tenant?—The whole Tweed.

Is this the total produce of the river?—No.

Is it the produce of the Tweed besides the quantity of salmon consumed in the country?—It is.

Have you any mode of estimating that quantity during the same period?—None at all.

You mean the Committee to understand, that this account presents a fair view of the comparative produce of the river during those years?—Yes.

How high up the river Tweed does this account apply to?—About thirteen miles up; as high as Coldstream.

Have you any means of giving the Committee information respecting any fisheries that may exist higher up the river?—I believe they are of a very trifling nature; I have seen the rental above Coldstream, but it is but small; I should not think the value of the Tweed above Coldstream is above 300*l.* a year.

Do you consider that the decrease, which is exhibited by this account, applies to all parts of the river from the sea, as far as Coldstream?—Yes, I do.

Has the fishery decreased more or less in any particular portions of the river?—No, it has pretty equally decreased.

Does the salmon fishery of the Tweed exist in the tide way and salt water?—Yes, in both.

To what extent towards the sea?—The most valuable fishings are within a mile of the mouth of the river.

Do you mean up the river?—Yes, up the river.

What do you mean by the mouth of the river?—The entrance of the salt water into the river.

How far is that below Berwick?—About half a mile.

Does any fishery exist from the mouth of the river coast-ways at all?—Yes, on both sides.

To what extent?—To the south about the distance of two miles, and to the north about a quarter of a mile.

What is the value of those fisheries, as compared with the fisheries within the mouth?—To the south of the mouth the value will be about 400*l.*; it is very much reduced lately; and to the north about 100*l.*; it is all rocks in the north.

Having

Mr. John Wilson.
(May 5.)

Having delivered in an account of the total produce of the fisheries of the river Tweed, from Coldstream to the mouth of the river, and in the fisheries adjacent, can you state to the Committee the rental during the same period?—I can state about the present rental, but I cannot state the rental for the whole period.

Can you state the rental during any of the years to which that account applies?—I can state the last year, or the average for seven years.

State the rental for the average of seven years, and the rental during the last year?—The rental for the average of the last seven years would be about 12,000*l.* and for the last year about 10,000*l.*; there are some leases that were let for seven years very high, which are not yet expired.

Do you think that the rental of the river has fallen as yet in proportion to the decrease in the fishery?—No, it has not.

What do you consider would be the rental applicable to the rate of produce stated in the last year?—I should think the rental should not exceed 5,000*l.* for the last year, to pay the expenses of the fishing; the rents on the Tweed should be reduced fifty per cent.

Are there any fisheries on the river, where the decrease has been peculiarly great, which has occasioned difficulty in letting those fisheries?—There was one fishing let for 2,000 guineas about seven years ago, and now that fishing is reduced to 1,000 guineas; last year that fishing did not pay the expenses of fishing, I have understood.

Does the lease for seven years still subsist?—That lease was for eleven years.

Does that lease still subsist?—It still subsists; it was reduced fifty per cent.

Is it expected that that lease can endure, or that it must be voided by the tenant?—It must be voided by the tenant, I think.

What should you consider the real value of that individual fishery?—I should think just now, if it was let by auction, it would not let for 500*l.*

Are there any other fisheries where a similar great decrease in value has taken place?—Not exactly; I can give the Committee an instance of fishings, belonging to Mr. Berry, which I have managed for the last three years; what they were worth prior to that time, and what they have been since; Mr. Berry was offered 1,350*l.* a year for those fishings for three years; he wanted 1,400*l.* which they would not give; he fished them himself since, and averaged them about 900*l.* a year for the last three years, and those fishings are in different parts of the river; some at the mouth of the river, and some as high as six miles up the river.

Can you state the quantities of fish caught during the periods for which you have stated the different values?—No.

During this period in which that falling off has taken place in value, has the price of salmon fallen or risen?—I think for the last three or four years the prices have not been so good as the three or four years previously.

Do you consider that the value of the fisheries has decreased, independently of the decrease in the price of salmon?—Yes, I do.

Is that decrease in the value of the fishery owing to any other cause than the diminution in the number of fish caught?—No other cause than the decrease of the produce.

To what causes do you attribute the progressive decrease of the fishery, either generally or with reference to particular seasons?—I think the general decrease in the Tweed is from the great depredations that have been committed on the river in close time; the number of fish that are killed in close time is immense; what we call the breeding fish. I suppose many thousands have been taken out of the Tweed this last winter. The Act is so deficient that we can hardly bring any of the offenders to punishment: this last winter the bailiffs took upwards of eighty nets out of the river in close time; the men that were using those nets were standing by them, but even then, unless they were actually seen with the nets in their hands, you cannot convict them by Act of Parliament.

Will you state fully your views on this subject?—There were eighty nets and two boats taken in the river; those nets can only catch fish at night-time, and those men attend them at night, and it is impossible that the bailiffs can see them touching the net in the darkness of the night in a cloudy night; and

Mr. John Wilson.

(May 5.)

though they see six or eight men actually fishing in the river, you cannot convict them if they have not the nets in their hands. The fish are sent to Edinburgh generally, and there they are protected, from the circumstances of the Scotch fishings beginning so early; they say they come from the Clyde, from fishings which commence in December; at that time they are quite unwholesome food.

At what time of the year are those depredations committed?—From the 10th of October to the 10th of January: November and December are the principal months.

Are there any other modes resorted to for taking those fish during close time and the nets to which you have alluded?—No other; except in severe winters they spear them.

Have you ever heard of a practice in the river Tweed, which has been termed burning the river?—Yes, I have; a considerable distance up the Tweed.

At what season is that practised?—In the months of November and December.

Describe the practice and its effects?—I never saw it. The fish come to the light and they spear them.

Is it not supposed that every fish in any portion of the river may be taken out by that means?—No, I do not think that; they certainly have taken out a great many.

Are there any other causes to which you would ascribe the decrease of the fishery?—There is a want of protection for the fry going down the river; angling is carried on to a very great extent, which is very injurious to the river, and the quantity of fry that is killed in mill sluices and in different engines is immense, they are taken out in baskets full; all angling should be prohibited in the months of April and May, and some very severe penalty attached to people for killing fry.

At what season do you apprehend that the river may be said to be clear of fry; that they have all returned to the sea?—I think they commence going down about the end of April, and finish going down about May; they then return again at the end of June and the commencement of July.

In what state do they return?—Perhaps from the end of June they will average three pounds, and at the end of July about four or five pounds.

By what name are they known?—The name of gilse.

Is there any intermediate state in which the young salmon ever return to the river, between that of fry and of gilse?—We have them of all sizes; but generally when they weigh about one pound weight, they put on the appearance of gilse.

Are you acquainted with any name for the young salmon, except fry and gilse?—They go by no other name than salmon fry till they put on the appearance of gilse.

You have stated, that great injury to the salmon fishery arises from the destruction of the salmon fry; will you state whether any destruction arises at a previous stage, namely at the time the parent fish spawns and before that spawn gets into a state of life?—I should think not myself.

Have you any knowledge whether there is any mode of fishing practised in the upper parts of the river, which is injurious to the spawn?—I should think there is none whatever injurious to the spawn.

You do not speak of your own knowledge, respecting any other part of the river?—No.

Is there any, and what Act of Parliament regulating the salmon fishery applicable to the river Tweed?—There are four particular Acts of Parliament to regulate the fishings of the river Tweed.

Will you state their dates?—The first I think was obtained in the year 1771, and the last I believe in 1806.

Are there any usages or regulations acted upon or applicable to the salmon fisheries of the river Tweed, independently of the Acts of Parliament which apply to that river?—None.

Does it consist with your knowledge, that the destruction of salmon in the close time has been much greater in late years than in former years?—It has increased very much within the last three years.

To what cause do you attribute that increased destruction in close time, within

Mr. John Wilson (May 5.)

within the last three years?—The winters have been very mild, and they can perform those operations much easier in mild weather than when there is frost and snow on the ground, and there are more men out of employment.

Have the rents of the fisheries up the river fallen more in proportion than the rent of the fisheries near the mouth of the river?—I think they have, from this cause; the last three years have been very dry seasons, which prevents the fish from getting up the river; not from any other cause.

Does the small rent which the proprietors up the river now receive, make them less careful in attending to the preservation of the fish than formerly?—I think the upper proprietors do not pay that attention to preserving the fish, from this cause; their fishings are let to very poor people, and in those dry seasons they have not been able to pay any rent, and they make up their rent in close time, when the under fishings are not at work.

You mentioned, that the fish that were caught in close time were unwholesome food?—Yes.

Are there any fish caught at other periods of the year, than at close time, that are unwholesome food?—Yes.

In what part of the river?—All parts.

Any part more particularly than the other?—The upper fisheries more particularly than the under fisheries.

Is it after the close time ceases, or before the close time commences, that those unwholesome fish are caught?—Both.

Are there more of those unwholesome fish caught after the close time expires, or before the close time begins?—I should think immediately after the close time expires.

With regard to those unwholesome fish, are they fish that have spawned, or the fish that are in a state preparatory to spawning?—Before the opening of the river the fish have spawned, I should think; at the closing of the river there are very few that have spawned then.

When does the close time expire?—Upon the 10th of January.

How long after the 10th of January do you continue to catch unwholesome fish in the river?—I should think till the 1st of February; there are a great many bad fish caught on the 1st of February.

Do any practices prevail in the river Tweed injurious to the salmon fishery, and for which you conceive that the law does not provide a remedy?—I think I stated before, that we could not convict those men fishing with nets, unless they had a net in their hand.

Are there any other practices?—I have mentioned angling, and destroying the fry in the mill sluices.

To what extent is the law enforced?—If you can catch them fishing, you can send them to gaol, if you can catch them with the nets in their hand; the last season there were two men sent to gaol for three months, that is the only punishment that can be inflicted; the Act is so defective, that the Scotch magistrates will not act at all; we had a trial before the court of Session, and there was some mistake; it cost the commissioners of the Tweed three or four hundred pounds; at this very time we are expending about 600*l.* a year for the protection of the Tweed, and to very little purpose.

You have stated, that some poachers, detected with nets in their hands, were sent to prison for three months; are anglers with a rod punished also?—Not at all.

There is no provision for their punishment?—None; the Act allows angling in April and May.

Can you state if there exist any obstacles to the enforcement of the existing law?—I cannot state any obstacles; I believe there are none.

Is there any feeling in the county against the law?—There is against those that transgress; the respectable people rather protect the fry; it is done by the lowest class of people.

Are the gentlemen of the county active in suppressing the poachers?—They are not now, the magistrates of Scotland, from the last-mentioned circumstance; they were taken to the court of Session, and then it was ordered that the commission should pay all expenses.

Are the magistrates, when cases are brought before them, willing to enforce the penalties?—Yes, if they see their way clearly, which they cannot do by the present Acts.

Will

Mr. John Wilson.

(May 5.)

Will you be so good as inform the Committee, what the various modes of fishing are which now exist in the river Tweed?—The principal mode of fishing in the river Tweed is by a net and coble; then there is what they call still-fishing, that is, the net is fastened upon the shore, a man goes into a boat, and holds the other end in his hand, and when the man sees the fish coming up that part of the river, he gives notice to a man ashore that has the line attached to the other end, that net is pulled to shore; that is what they call stilling.

Are those the modes of fishing that are exclusively used by proprietors of salmon fishing up the Tweed?—There is another mode, what they call a hang-net.

Does that net cross the river?—No, it goes a short way into it; it is in places where they could not use the coble-net; it is a very trifling fishing.

Are those three modes of fishing supposed to be authorized by law?—Yes; they have been used from time immemorial.

Do you conceive that any of these modes of fishing tend to an undue destruction of salmon, or of salmon fry?—None whatever.

Have stake nets ever existed in the river Tweed, or in the portions of the sea adjoining in which you say fisheries have existed?—Never; there is not a stake-net within fifty miles of the Tweed.

Do you mean to say that such stake nets never did exist within that distance?—They never did exist within the knowledge of the oldest fisherman.

Can you state whether, in your opinion, any improvements in the modes of salmon fishing could be established, either in the river, or in the parts of the sea adjacent?—I do not know of any.

Has it ever been in contemplation to establish stake-nets?—Never.

Is not there a particular Act connected with the Tweed, making it imperative upon the fishermen to observe what is called the Saturday Slap?—We have no particular regulation of that kind in the river Tweed; it is an open river.

In the account which you have delivered in of the produce of the river, it appears, that in the year 1816 the fishery was almost equal to some of the greatest years; to what cause do you ascribe such a revival of the fishery during that year?—The reason why 1816 is equal to the fishing of 1803 is, that prior to 1816 they only used to put about six stone and a half of fish in their boxes, and now they put about eight stone of fish in their boxes.

Do you mean to state, that from the year 1816 to the present time it has been the practice that boxes should contain a larger quantity of fish than during the previous years?—Yes.

By how much?—I should think full a stone or a stone and a half of fish in each box.

By that statement how much must be added to the annual produce in order to make the comparison with former years a fair one?—About a seventh or an eighth part.

Can you give any reason how it has happened that the stake-net fishery, which has been so successful at the mouths of many of the fisheries, has never been attempted at the mouth of the Tweed?—I do not think there are any good stations for stake-nets in the mouth of the Tweed; I rather think there is something in the last Act which prevents what are called unlawful modes of fishing, and that that is one of them; but it never has been agitated since.

Do you consider that any alteration in the close time would be beneficial with a view of producing a larger quantity and a better quality of fish in the river Tweed?—Yes, I do.

What alteration would you suggest;—I think the fishing should commence not earlier than the 1st of February, and close not later than the 10th of September, that is closing a month earlier and commencing about twenty days later; the fish that are caught in September, a great many of them, are very unwholesome food, and are all in a state of parturition.

They have already spawned?—No, they are full of spawn then.

At what season do you apprehend that the salmon get into that state previous to spawning, which makes them unfit to be taken?—I reckon salmon is at its best at Midsummer, and falls greatly off after about the middle of July; and in August they get considerably advanced with spawn; and in the end of August, and the beginning of September, they get very full of spawn.

Is not the salmon, immediately after it has spawned, considered to be in a most unwholesome state, and has not it a very bad white appearance?—I should

I should think it is equally so a month before spawn, and a month after spawn.

Mr. John Wilson.

(May 5.)

What is the actual state of the fish the month before it spawns?—I cannot exactly state a month before; but a very short time before, when the spawn is just leaving the fish, it is merely just two pieces of skin, just like a cow in calf.

Are there not instances of its producing serious consequences?—I saw an instance in the paper, of a whole family dying in consequence of it.

At what season do you believe that the salmon in general leave the sea and ascend the river for the purpose of reaching the spawning ground?—I think they commence leaving the sea about the middle of August; they all try to approach the river at that time.

You mean the mother fish?—Yes.

It is from that opinion that you state that the close time ought to commence on the 10th of September?—Yes; that is a month earlier than it does now; by that means the country would have generally a fine spring fishing; and salmon are six times more valuable to the proprietors and tenants at that time than they are afterwards.

It is your opinion that the close time ought to continue from the 10th of September in the Tweed?—I think it would apply to all rivers; at least I have been in the habit of managing a great many rivers.

Your opinion is, that the close time ought to extend from the 10th of September to the 1st of February?—Yes, and that would apply to all rivers.

Is it your opinion, that by the 1st of February the parent fish have all returned to the sea, and that no foul fish will be found in the river?—The greatest part of them have then returned to the sea, and consequently there are very few foul fish in the rivers.

What is your opinion with respect to guarding the fisheries, by preventing angling in the river during a certain period of the year?—The angling is very destructive to fish, and should be entirely prevented for the two months that the fry are in the river.

What months are those?—April and May.

That is the exent to which you would propose to impose the restrictions on angling?—Yes.

Is it consistent with your knowledge, that the resort of the fish to different rivers would render it necessary to have any different regulation, with a view to suit different rivers?—I am fully of opinion, from the observation I have had of many rivers I have managed about six or eight years back, many rivers in Scotland, so far south as North Esk in Forfarshire, the Dee and the Don in Aberdeenshire, the Beauly in Inverness-shire, and the Locky in Inverness-shire, and I have found from experience, that there is no necessity to commence fishing in those rivers till the 1st of February; in fact, fishing those fisheries before the 1st of February, you would catch nothing but black fish, and I have repeatedly given orders to the fishermen, to return all those fish to the sea, which they have done when we did commence before February.

You say, you have given orders not to commence till the 1st of February; are you of opinion that it would not be advantageous to commence any later in any river?—No, I think not; I think it may be safely commenced in all rivers on the 1st of February; the Ness, I believe, is an earlier river.

You know the Ness and the Beauly fall in together?—Yes.

Do you apprehend that the interests of different fisheries in the same river vary considerably, and that therefore the interests of different individuals are more or less irreconcileable as to the season at which the close time ought to commence and cease?—I think there is only one interest.

Do you mean to express this opinion as applicable both to fisheries in the fresh water and tide way, and such as may lie adjacent to the mouth of the river along the sea coast?—Yes, fishing in general; that no fishing should be later than the 10th of September.

It is your opinion, that by this regulation the greatest quantity of salmon in fine condition may be permanently supplied to the market?—It is, most decidedly.

Is there any difference in the quality of salmon taken at different parts of the same river, or in the tide way, or in the sea adjoining, during the proper season?—None at all.

Mr. John Wilson. (May 5.)

Can you inform the Committee whether salmon, bred in a river, and going to the sea, return to the same river, or go to other rivers, as accident may lead them?—I am fully of opinion, that every river has a peculiar breed of salmon; they all return to the same river where they were bred.

Have you ever known, during any season, the salmon quit the river Tweed from any accidental cause, and run to any other river?—No, never; I have attended a few weeks in the year at Montrose; there are two rivers; the South Esk is about four miles from the North Esk, and the species of salmon is quite different in those two rivers.

Can you state to the Committee any circumstances or facts which have arisen in your own experience, upon which you found this opinion?—I state my opinion from what I have observed in the South and the North Esk; they are within four miles of one another, and the fish are quite different in those two rivers.

How comes it then, when depredations are committed, and fish improperly taken in one river, and sold under the pretence that they are taken in another, that it is not possible to detect that?—Fishermen who are accustomed to be upon that river could tell you at once.

Do you mean to say that you yourself, from your own knowledge, could distinguish a fish from the North Esk from that of the South Esk?—Yes.

Can you describe the distinction?—One is a large coarse scaly fish, and the other is a smaller and a finer fish.

You have stated that the fish at the Ness may be caught at a much earlier period than in other rivers in that neighbourhood?—I have always understood that the Ness has a season in December, which no other river has, but from what source I do not know.

You are certain with regard to the Beauly, that that corresponds with the other rivers that you have mentioned?—I am certain of it.

Have you ever rented either of those rivers?—I just now manage the Beauly river for Mr. Berry.

Were any of your partners concerned in the Ness at any time?—None.

Do you believe that there are great numbers of fish on the sea shore, adjacent to the estuaries and mouths of rivers, who in point of fact do not go up those rivers?—I believe they all go up those rivers; they are upon the shore, and get up the river if they can.

With regard to the mode of destroying salmon, whether fair or unfair, do you know that nets are put into the water on Saturday, near Berwick, and kept there all the Sunday, in defiance of the regulation?—None whatever; we have bailiffs, who regularly go up the Tweed every Sunday at ten o'clock, and take any nets that they may find in the water, and the proprietors of those nets are fined, if there are any such nets caught.

In point of fact, do you know that no such practice exists?—Yes; from my own knowledge, there is no such practice in the river Tweed.

Supposing that such a practice did exist, do you not conceive that it would be exceedingly destructive of the salmon, and would stop a great many of the fish?—I think it would be very injurious, and very unjust; the stake nets fish all the Sunday.

You have stated, that it was extremely difficult to carry the law into effect, as against poachers; has it occurred to you, that any alteration, and what, might be beneficial, upon the subject of penalties?—I think that every man that was found by the river side, in close time, in the hours from eight o'clock at night till six in the morning, should give an account of what he is doing there, if he is found near nets; if he was to be obliged to give an account what he is doing there, and could not give a proper account of himself, he should be imprisoned; they laugh at the bailiffs when they come up to them, although the nets are before them.

Are not the nets seized?—They seize the nets, but they do not care for that in any way; they get an old net for 30*s*.

Did it ever occur to you, that the severity of the existing penalties might in some measure tend to prevent the execution of the law?—Not at all.

What are the penalties?—Fine and imprisonment.

Veneris, 7° die Maij, 1824.

THOMAS FRANCIS KENNEDY, ESQUIRE,

IN THE CHAIR.

Mr. *John Wilson*, again called in; and Examined.

Mr. John Wilson. (May 7.)

WILL you state to the Committee, whether there are any natural or artificial causes, works, mines or manufactories, which tend to prevent the propagation of salmon, and their free passage to and from the sea, in the Tweed?—None whatever; there are no manufactories to prevent the passage of the salmon.

Are there any mill-dams, or other impediments to the fish getting into the upper parts of the river?—I am not aware of any.

Are there any such impediments known to you, in the river Tweed, or in any of the rivers that run into it?—I have understood, that there are several impediments in the small rivers that run into the Tweed, from mill races and mill sluices not being properly opened.

Do you think, if no alteration in the law were to be made, and if the present practices which are injurious to the salmon fishery were to continue, that the salmon fishery in the river Tweed would continue still further to decrease?—I am fully of that opinion, that if there is not some new law adopted for the protection of the fish in the river Tweed, that that river, in a short time, will not pay the expenses of fishing.

If such alterations in the law were made, as you should consider sufficient for the protection of the salmon fishery, do you consider that it would be likely to increase beyond the value to which it has attained even in the most prosperous times?—I should think it would increase the value of the river very much, but I do not know that it would beyond what it has heretofore been.

On a former day you stated that, in your opinion, the practice of angling should be discontinued in the months of April and May; the Committee wish to know from you, why you propose to prevent angling, while the river is left open for other fishing at that season?—To prevent anglers from killing the young fry; if the fry are killed going to the sea, we cannot have any salmon.

Do you believe, that the angling in that river is of sufficient extent to interfere with the quantity of fish in the river?—Yes, I believe it is.

Are there any other modes by which, in the Tweed, the salmon fry are taken, besides angling?—I think I mentioned, in my former examination, that there are a great many fry taken in the mill sluices, by the millers, with different engines; even baskets full are often taken by the millers up the small rivers coming into the Tweed.

To what extent do you believe the angling to go in that river, from your own knowledge; have you seen the number of persons who usually fish in the river?—I have seen from my own window upwards of 70 or 80 people angling within the distance of half a mile on the Tweed.

Is there any greater facility in the taking the unwholesome fish with a rod, than the wholesome fish; is there a greater avidity in the fish to take the fly?—Yes, there is.

Is spearing practised in the Tweed to any extent?—A considerable way up the Tweed, beyond Coldstream, it is.

Both during close time, and during the fishing season?—I think not during the fishing season.

Is the mesh of the nets you use so close as to catch fish too small for consumption?—There are a great many fish of a pound weight go through the nets.

What is the smallest fish which your nets will catch?—I should think a fish about a pound and a half; I think a fish of two pounds will go through the mesh of the net.

That would let all the trout through?—A great many of the small trout go through.

You catch the large trout?—Yes.

You said, in your former examination, that you were manager of a fishing on the Beauly?

Are

Mr. John Wilson.

(May 7.)

Are you at present the tenant?—No; Mr. Berry is the tenant.

Can you state the rent which Mr. Berry pays for the Beauly?—£. 1,300.

Is that as much as he has paid for a great many years; has it increased or decreased within the last ten years?—It was 1,250*l.* I think, up till 1815 or 1816. They have advanced 50*l.*; but Mr. Berry got 18,000 fir trees, for which he gave 1,600*l.* besides.

In point of fact, to your knowledge, has the produce of the fishing in the Beauly increased or decreased:—Decreased most considerably.

To what cause do you ascribe that decrease of the produce in the Beauly?—To the stake nets and yairs in the Murray Frith.

Can you describe the situation of those stake nets?—No, I cannot.

Are they in the mouth of the river Beauly?—They are a very short way from the mouth of the river Beauly.

What do you consider to be the mouth of the river Beauly?—I should think about two miles below the village of Beauly, but I do not exactly know; I only go there once a year.

Do you know, that there are any stake nets higher up than the Red Castle in the Beauly Frith?—There are some at Red Castle.

You are sure that there are stake nets at Red Castle?—I am sure there are stake nets at Red Castle.

Do you know of any on the other side of the estuary?—I think there are, but I do not know them by name.

How long have those stake nets existed in that estuary?—I cannot tell; they were there when I first went down, in 1816.

Did you ever hear of any objection to them, on the part of the upper heritors?—Yes, I have.

What were the grounds of that objection?—That they were illegal, and destroyed the fishing of the river Beauly considerably; the present proprietor, Mr. Fraser, is now prosecuting the proprietor of those stake nets.

The prosecution is still pending; it is undecided?—It is still pending; Mr. Berry pays one-third of the expense, and Mr. Fraser two-thirds.

Do you, from your own knowledge and experience, concur in that objection, and in the grounds of it?—Yes, I do.

That stake nets are illegal, and destroyed the fishing of the river?—The stake nets destroy the fishing of the river very much; and I should suppose they are illegal.

You do not know any thing of the position of the stake nets below Red Castle?—No, I do not.

Do you know the state of the Murray Frith from Fort George towards Inverness, on either side, with regard to stake nets?—Here is a letter which I have received, mentioning similar facts, from a person of the name of Leslie, a very correct man; he has no knowledge of my being here; it is merely a letter in the way of business; he mentions that the stake nets are very destructive of the fry; he is complaining just now of the great injury the stake nets are doing to the fry going to the sea; he says, "There are at present about 20 stake nets betwixt Fort George and Kessock, and as the Frith does not average much above two miles in breadth there, in some places, the stake nets from the opposite sides are nearly meeting; and as they are seldom kept sufficiently clean to allow the fry to pass through them at this season, when they are going to the sea, so they are kept up two months after close time, making the greater part of their fishing of spawning fish entering these rivers; no wonder we get few fish, when the breeders are destroyed coming to the river, and the smelt destroyed going to the sea, by these destructive engines stake nets, and yet we are told they kill neither the one nor the other. If you send me a warrant to fish any stake net I like for fry, I will send you a kit of them. I have seen three large baskets taken out of the one at Campbeltown, full of dead smelts, on a Monday morning, and the only excuse was, that they could not clean their net of sea weed of a Sunday."

Do you know whether that is on both sides, or only on one side?—On both sides, for he says, they very nearly meet.

How often have you visited the stake nets?—About eight or ten times; I go once a year.

Are you informed what quantity of salmon is caught in those stake nets annually?—No.

Mr. John Wilson.

(May 7.)

Are you very much interested in opposing the stake fishings?—No.

Are not you a manager of the river for another person?—Yes.

Do you, of your own knowledge, know any thing respecting the stake net fishery in the river Beauly?—Nothing more than what I have mentioned.

Can you state, of your own knowledge, the width of the frith at Beauly, where the stake nets are placed?—No, I cannot; I have been there, but I cannot state the breadth.

Can you state how far the stake nets extend from the shore?—No, I cannot; they extend a long way.

Is Mr. Berry the lessee of the fisheries where those stake nets are established?—He is the lessee of the river Beauly, but those stake nets are below the river Beauly.

Is Mr. Berry a party in the law suit having for its object the removing of those stake nets?—Yes, he is.

Are you acting manager for Mr. Berry?—I am.

Do you conceive that Mr. Berry has a material interest in the success of the law suit for the removal of those stake nets?—Not a very material interest, for Lovat would take the fishery off his hand when he pleases.

Mr. Berry bears a proportion of the expense of the law suit?—Yes, he does.

How do you account for his bearing a part of the expense, if he has no interest in the success of it?—Lovat was very kind to his tenants; he gave an abatement last year of 20 per cent, and he said he thought his tenants should assist him in the law suit, which Mr. Berry readily consented to do.

His tenants generally?—No, merely the tenant of the fishing; but I believe the abatement was general.

Mr. Berry is the lessee of the river fishing?—Yes.

And he has contributed to carry on the law suit for the removal of the stake nets in the lower part of the river?—He has so.

Having so contributed, do you not consider that Mr. Berry is materially interested in the removal of those stake nets?—He certainly is, in some degree; but if Mr. Berry thought proper, he could get rid of the fishing when he pleased; therefore it is merely joining the proprietor from complaisance, in the law suit.

Has he a long lease?—He has a lease which expires in 1832; he has a break in that lease, which expires in 1825.

Do you apprehend that the circumstance of the stake nets being removed or not, by the issue of this law suit, would affect Mr. Berry's inclination to keep or give up his concern in the fishery?—I think, if the stake nets were removed, and the fishery was a profitable one, Mr. Berry would keep it; but if it is not, Mr. Berry would give it up; he has no interest in it in any other way.

Have not you stated that Mr. Berry has paid 50*l.* a year more the last few years than he did formerly for this fishery?—Yes.

How do you account for that?—The advance of 50*l.* took place, but that river had not been advanced for many years before that; it had been as low as 1,250*l.* many years before, prior to the advance of 50*l.* and that being a very profitable concern, was the cause of giving that 50*l.* in advance.

Not because the salmon were decreasing?—No, the salmon were not decreasing; that agreement was gone into in 1814, the new lease was agreed for from 1814, at an advance of 50*l.*

Are you quite sure that those small fish in those stake nets are actually and *bonâ fide* salmon fry?—I cannot say that; I never saw them; the men say so.

Do not you know that there is some difficulty in distinguishing between certain small fish and salmon fry?—I am not myself capable of judging; they say that they are salmon fry.

Are you any connection of Mr. Berry's?—Yes, I am his nephew.

What quantity of fish are taken in the river Beauly in that fishing?—I can hardly state from memory, but I have seen on the books 7,000 salmon taken in the Beauly, and I have seen only 1,500 or 1,600 in a year. I think since 1816 it has been a losing concern.

Can you state what quantity was taken last year?—I think between two and three thousand salmon (I am merely speaking from memory) and about 6,000 gilse.

Do you recollect in any former years the quantity of salmon that were taken?—I think it has been as high as 7,000, and from that down to 1,500,

Mr. John Wilson.

(May 7.)

and from two to five thousand in a year. I do not think there has been more than four or five thousand in any of the last years.

Has the decrease been progressive during the years in which you have been acquainted with that river?—Yes, it has, these three or four years back.

Do you attribute that decrease to the stake nets?—Yes.

Are there any other causes to which, in addition to the stake nets, you attribute it?—None, that I have heard of.

You have stated, there has been a great decrease in the Tweed?—Yes.

Are there any stake nets there?—No stake nets.

Might not the same causes also have operated in the Beauly which have operated in the Tweed?—The river Beauly is particularly watched in winter, that the breeding fish are not destroyed.

Do you mean to say, that the practice in that river for the preservation of the fish, with respect to close time, is much better than the practice in the Tweed, with respect to close time?—Yes.

Is the practice of the Beauly river regulated by the old law of Scotland, or by local regulations?—Mr. Berry is the only tenant of the river; he sends his own fishermen, that are employed in the summer, to protect the river in winter.

Do you know whether whatever steps are taken by Mr. Berry, or by anybody else, for the protection of that river, are under the regulations of the old law of Scotland, or under the regulations of local acts of parliament?—I suppose under the old law of Scotland.

In the river Tweed it is by local acts?—By local acts principally.

Do you consider, that there is therefore a more efficient power of preventing poaching in the river Beauly than in the river Tweed?—I should think the cause of the Beauly being better protected is from its not going through such a fertile country; there are very few inhabitants about the river Beauly, which prevents their having any of that poaching which there is about the river Tweed.

Do you know that Mr. Fraser, of Lovat, is the sole proprietor of the river Beauly?—Of that part.

To whom do the stake-nets belong?—I cannot answer that question.

Do you know what has been the relative value of the stake-net fisheries, compared to the fisheries belonging to Mr. Fraser, of Lovat?—I do not.

Do you know whether they are less or more?—I cannot tell.

Do you know whether the stake-net fisheries have decreased in value as well as the fisheries in the upper part of the river?—I cannot answer that question, but I should think they have decreased.

Do you know whether the upper fishings upon the Beauly are let to any tenant?—I believe not.

Will you state to the Committee, whether you have reason to know that there are any cruives upon the river Beauly?—There is one; I think there is a cruive belonging to the fishing.

Is that upon the fishery belonging to Mr. Fraser, of Lovat?—Yes.

Is any considerable quantity of fish taken by means of that cruive?—Yes, there are.

Is that a part of the river under lease to Mr. Berry?—Yes.

Mr. Berry resorts, therefore, to that means of fishing in the river Beauly?—He does.

What may be the value of the cruive fishing?—They do not keep an account of it.

Should you consider, that the removal of the cruive would be injurious to the value of Mr. Fraser's fishing?—Yes, it would.

To any considerable amount?—To a considerable amount: for this reason, it would cause great expense in fishing that river, where it is done now at very trifling expense.

Do you consider, that the cruive is nowise injurious to the free passage of the fish to and from the sea?—None; from the size of the slaps, and the way they are kept open.

Does the cruive kill none of the fry?—No, I think not.

Do you know whether or not the Saturday slap is observed?—It is.

You cannot tell what the separate value of that fishing may be from the other?—I cannot; they catch a great quantity of fish there.

What

Mr. John Wilson.
(May 7.)

What may be the proportion of fish caught there?—I cannot tell.

Is it one half of the whole fishing?—I should think it is.

Is it more than one half?—I cannot answer that question.

Are the fish caught in the cruive injured by being caught there?—If they are allowed to lie in the cruive a considerable time, they are; but if they are readily taken out, they are not injured.

If they lie during the night, and are not taken out till the morning, are they injured?—No.

Do you find, in practice, that the fish generally caught in the cruive are of less value than the fish caught other ways?—I cannot answer that question; if the fish were to come to London in ice, we could tell whether they were more injured; but they are all pickled there after the month of May, and you cannot tell whether they are or not.

You said, it would be attended with a great additional expense to fish that part of the river, if the cruive were not there?—Yes, I think it would.

With that additional expense would they be able to catch as much fish there as they would with a cruive?—I should think they would.

Is it your opinion, that the removal of this cruive would allow a great many more fish to go up the river?—I do not think it would.

Has not the cruive the same effect as a stake net?—No; the distance between the rails is three or four inches, I think.

When the slaps are shut, has not it the same effect as a stake net?—No, I think not; the distance between the rails is wider.

What is the size of the meshes of the stake net?—Two inches and a half between the meshes, or thereabouts.

The rail part of the cruive consists of upright pieces?—Yes.

There are no cross bars?—No, I think not.

Do you mean to say that those bars are four inches apart in the cruive?—Yes, three or four inches, I suppose.

Do you speak from your own knowledge of the stake nets?—Only from report.

You said that if this cruive were done away with, it would occasion a great deal more expense to catch at that part of the river the same fish that are now caught with the cruive; in what way would it occasion more expense?—They would have to fish a part of the river which they do not fish at all now; they only fish up to that cruive; they would have to fish two or three miles of the river which they do not fish at all now.

In what way would they have to fish?—With a boat and net.

Do you mean to say, that with a boat and net there would not be any greater facility for the salmon to escape up the river, than there would be with this cruive?—I think not.

Then the fishing with boats and nets must be kept on without intermission?—Yes; but there is always a free passage.

You have stated, that there are no stake nets at the mouth of the Tweed?—No.

Are there any bar nets across the river?—No.

There is no such thing as a bar net?—There is a hang net on some part of the river, that goes a short way in the Tweed, but it is of very little consequence.

There is no such thing as a bar net across the river, any where near the mouth of it?—No such thing.

Lunæ, 10° *die Maij*, 1824.

HENRY HOME DRUMMOND, ESQUIRE,

IN THE CHAIR

Mr. *James Bell*, called in; and Examined.

Mr. James Bell,
(May 10.)

WHAT rivers are you particularly acquainted with?—The Tay.

Have the salmon fisheries in the Tay decreased of late years?—They have decreased, certainly.

For

Mr. James Bell.

(May 10.)

For some time back have the fisheries been decreasing in the Tay?—Yes, they have for some time back.

How long?—Since the year 1819 they have decreased a good deal.

Have they decreased in a greater proportion of late years?—Yes, certainly they have.

Has any particular part of the fishing decreased more than any other part?—It has decreased generally.

Have the fisheries in the other rivers, that run into the Tay, decreased also?—Yes; they have all decreased a little, unfortunately.

Is the fishing both in the fresh water and tideway of the river?—Yes.

Can you say whether the fishing in the fresh water or tideway is most decreasing?—It has decreased in both ways.

Are there any salmon fishings in the sea, adjacent to the river Tay?—Yes.

Do they extend to some distance from the river?—Yes, they do a little, not far; perhaps two or three miles.

Where do you understand the river Tay to stop, and the sea to begin?—At Dromley Sands?

And you call it sea fishing below Dromley Sands?—Certainly.

Can you give us any statement as to the comparative value of the fishings in different parts of the Tay now, and at former periods?—I cannot do it; I only know as to myself; I had these fishings at one time for 3,500*l.*; they fell off so much, I gave them up; another company took them at 2,000*l.*

What year did you give them up in?—At the time Hunter's fishing took place, stake net fishing.

Before 1819?—Perhaps just about that time.

Was it at the time Hunter's fishing was established that you gave up this fishing?—Yes.

You say, you attribute the diminution of value to this stake net fishing?—I do; two years after that they were let by public auction, and I took them at 1,205*l.* per annum, for a lease of three years.

Do you know when the decision of the court of Session took place, suppressing these stake nets?—I do not know exactly; that was the time they were let again.

Are there any other causes to which you attribute the decrease in the fishing besides that of stake nets?—Yes; by not persevering in the close time, and not protecting the fry.

To what cause do you trace this want of attention in preserving salmon?—The penalty is not sufficient; it is 16*d.* or 18*d.* or some trifling thing.

Is the penalty in practice of being enforced?—It is not, I think.

Is it not the practice to allow expenses of prosecution for those offences?—The sum for the first and second offence is a mere trifle.

Do you know the penalty for the third offence?—It is very severe. They pay for the first, and nothing else.

Is not the penalty so severe that you withhold enforcing it?—Yes, we do. The people who kill the fish are not punished at all; but those who are found selling it.

Do you impute that to the carelessness of the magistrates?—The law is not enforced; the present law is quite deficient.

Is that from want of information, or from the neglect of the magistrates?—I do not know what neglect it is.

Tell me distinctly, whether you have applied to any magistrates to enforce such penalties as do exist, and whether they have been enforced?—No. We used to apply to Mr. Peddie, the town clerk, and agent for Lord Gray, and one of the proprietors of the fisheries.

Then it appears Mr. Peddie is in fault?—He says he can do no more, the penalty is so confined.

You have mentioned these additional causes of the diminution of the fishing; are there any other causes?—No.

Are there any cruives or cruive-dikes across the Tay, or the rivers that run into the Tay?—In the Earne river, that runs into the Tay, there is a cruive-dike belonging to Lord Kinnoul. We pay no attention to the Earne.

Do you mean to say there is a great quantity of fish killed at Lord Kinnoul's cruive in close-time?—There and thereabouts. I do not know it is in the cruive. There is one man takes a deal.

Have

Mr. James Bell.

(May 10.)

Have you ever proceeded against that man?—My people have, but I never did myself; they go up, after the season is over, to watch them.

What has happened in consequence?—Sometimes they bring away the nets and boats.

But no prosecution is raised?—No; we have no warrant for prosecuting them.

You never applied for any interdict to prevent them fishing at close-time?—No.

In short, you trusted entirely to Mr. Peddie for the mode of punishment?—Yes.

Are you of opinion that if the law as it now stands was strictly enforced, that it would be sufficient for the preservation of salmon?—Far from it.

You have said that with regard to the third offence the penalty is too severe?—I do not know it is on the Tay; it is in some parts of Scotland.

What is the period of close-time that you observe on the Tay?—From the 26th August to the 10th December.

And is that period of time regularly observed by the fishermen in your neighbourhood?—Yes.

Is there any of the legal modes of fishing practised on that river, which you conceive prejudicial to the breed of the fish or to the salmon fry?—No; none.

Do you conceive the stake-nets are prejudicial?—I conceive they are; but that is not the legal fishing.

When were the stake nets established?—I cannot say the time.

Do you recollect whether the fishing perceptibly diminished immediately on the establishment of these nets?—Certainly; very perceptibly.

You have no doubt that it was the consequence of the establishment of these nets?—Yes.

You have said, that the stake net fishing has contributed much to destroy the salmon in the river; are you acquainted with the upper parts of the river Tay?—Yes, a good way up.

Do you know what particular modes of poaching are used in the upper parts of the river?—They fish with the net, and use spears in close time.

Do you conceive the salmon fishing is materially affected by these practices?—I do, certainly.

You have said, that the salmon fishery commences on the 10th December and ends 26th August; what periods do you think might be substituted with advantage?—Nothing better than the present for the Tay; for she is an early river, and her fish is soon pregnant.

Are you acquainted with any other rivers besides the Tay?—Not so much as the Tay. I have other fishings at Montrose.

What rent may you pay for the salmon fishery?—I pay in the Tay 8,000*l.* a year now, and better.

You pay rent elsewhere?—I pay 1,200*l.* a-year in the Tweed.

Do you think the present period of close time is equally well calculated for all parts of the Tay, and all the rivers that run into the Tay?—Yes. I do not say for the Tweed.

And do you think the same periods would apply to the Dee and Don, and other rivers on the east coast of Aberdeenshire?—No. They do not begin so early by a month. The fish is full as good on the 10th December in the Tay as at any other time of the year. The Tay is the earliest river in Scotland.

You have said the Tay is a month earlier than the Dee and the Don; how much earlier do you suppose the Tay is than the Tweed?—The Tweed fish is good in August; that is their best season. They fish till the 10th October in the Tweed.

What is the difference of time between the Tay and the Dee and the Don?—The Tay begins the 10th of January.

What is the difference you would propose?—I can speak to nothing but the Tay.

At what period should the fishing commence and end with most advantage?—It should cease on the last day of September, and should open on the 1st of February.

Is it consistent with your knowledge, that there is any illegal practice in the lower parts of the Tay, by means of which the fish are prevented from ascending

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(May 10.)

the river?—No; there are some poachers at the mouth of the river, but they are not tacksmen or proprietors; they often have nets taken from them; they often steal the nets of the tacksmen, and burn them.

Is it consistent with your knowledge, that nets are at any time fixed in the river during the Sundays?—I have heard nothing of that.

If such a practice existed, must you have known of it?—They may do it, and I not know of it; I never saw it; I can say nothing to it; I have often heard of people, six or seven miles above Tay, having nets of that sort, but I never saw it.

What parts of the river do you speak of, when you say you have heard of such a practice?—Above Horncliffe.

Did you never think it your interest to inquire so as to ascertain the matter?—No, I did not think it was worth while; they have told me of people putting nets across, and keeping the fish on their own ground, but I never saw it.

Do you know the methods of poaching which they employ; are you acquainted personally with the manner in which they poach the river?—They get nets on Sunday nights; we give up at ten o'clock, and then these fellows will go and fish till five in the morning, if nobody detects them.

What part of the Tweed do you rent; to what extent?—The shore side; General Tarrant's fishery for one.

How high is that above Berwick bridge?—It is all below Berwick bridge; it is from the bridge to the sea on the north side.

There never was any stake net fishing in that?—No, never.

Are you quite sure that no proprietors or tacksmen have fished near Berwick, or ever practised the barring of the river during Sundays?—I should think not; I never heard of any of them; it is only people of loose character; there is nothing of that at Berwick, nor up a long way: it is above the tide way.

Does the tide flow above Norham?—Norham is the extremity, I think.

Can you, from your experience as a fisher, point out any difference in the quality or description of fish that are caught in different rivers; would you know the fish caught in one river, from the fish caught in another river?—I have a little guess; not altogether; all fish come to their own river, we think.

What reason have you?—Because there are different sizes; because the Isla fish is not above 7 or 8lb. in weight; the Tay fish on the average is from 12 to 14 lb. weight.

Could you distinguish a fish caught in the Tweed from one caught in the Tay?—Yes, I think I could.

Is it your opinion the fish always ascend the river where they are bred?—I think so; I think they come up.

What reason have you for thinking so?—When a quantity of fry goes down, we expect a good season.

Is there any difference, according to your knowledge, in the quality or kind of salmon caught in stake nets, from those caught at other parts of the river?—Yes; the fish in the stake nets are full.

Is there any difference in the fish itself?—I hired a stake net for three years, and we often complained very much; when the water goes away, the fish is full, and gets quite heated.

I am not asking as to the effect the stake net produces, but whether the fish which enters the stake net, is different from the fish caught in another part of the stream?—I reckon the fish is not so good as those caught with the net and coble.

Then you are not aware of any difference other than what is produced by the mode of catching?—No; they are the very same fish.

You say that the catching of them in the stake nets, hurts the fish?—It depends greatly on the attention paid to them; they let them lie till the water goes from them, and the fish swells and is not so good. There is no fish so fine as the net and coble fish.

Have the fish that are caught in the stake nets, roe and melt in them?—Every fish has roe and melt in it, but they are very small in the first of the season, but they get progressively on.

Did you ever see a foul fish caught in the sea part of the Tay?—No; not in the sea part.

How far down?—A very short way down.

Have

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(May 10.)

Have you seen fish full of spawn, and near the time of spawning, caught pretty far down the river?—None; there may be one accidentally in a year or two.

Are there any artificial works, mines and manufactories connected with the Tay, that you conceive prejudicial to the fish?—No, I do not see any thing.

Do you conceive that the removal of the cruive dikes we have spoken of, would be advantageous to the breed of fish?—It would let the fish go further up; they say there is a man near these cruives who has been in the habit of taking a great deal of fish; more than any man that I know of.

Is he poaching?—It is all poaching; it is in close time.

Has there ever been any dispute between the upper and lower heritors, regarding fishing?—None in the Tay; there are no cruives in the Tay.

Is there any information you can give, that strikes you as material with regard to the fish?—Nothing material, that I know of.

Have you a statement you can furnish the Committee with, with regard to the rent?—Yes, my own rent; I do not know what other people pay.

Be so good as to produce it.—[*The witness showed his account in a book, which he was directed to copy out fair.*]

William Bell, called in; and Examined.

William Bell.

ARE you any relation to the other witness?—No.

Are you employed under him?—Yes, as foreman.

How long have you been employed fishing salmon on the Tay?—Twenty-four seasons; this is the twenty-fifth going.

Has the salmon fishing in the Tay, during that period, diminished?—Yes.

More or less of late years?—More of late years; more within these few years back.

Do you speak with regard to the whole river Tay, or any part of it in particular?—Generally.

Can you speak with regard to the other rivers that run into the Tay?—I believe the fishing has diminished in the Earne also.

Are you acquainted with the fishing in the sea part of the Tay?—No; my information applies to the river Tay as far down as the Earne joins the Tay.

Are you not acquainted with the fishing below the junction of the Earne?—No; I once had a charge there, but I have had no charge some years back.

To what do you attribute this diminution in the fish of the river?—To two things; to the close time not being particularly kept, and to the stake nets on the coast being continued so long after the fishing season, that it takes away a good deal of fish.

Are there any other causes that you can point out?—No.

Have not seasons a great deal to do with the variation?—There are some seasons better than others; are there any cruive dikes in the river or in the rivers that run into it?—There is one in the Earne.

Do you conceive, that this cruive dike is prejudicial to the breeding of the fish?—In close time it is certainly against them, if kept fishing.

When were stake nets first established on the Tay?—I think it was two or three years before I came to Perth; that is about 27 years ago.

Have they been removed since that time?—Yes.

When?—I do not exactly know the time.

To the best of your recollection?—I suppose about 11 or 12 years ago.

Was there an increase of salmon caught after that in the upper parts of the river?—Yes; there was an increase for some time.

Was it a considerable increase?—Yes, I believe it was; I know there was a considerable increase.

Can you say, from your recollection, positively, whether there was any increase or no?—There was an increase.

Did you attribute that increase to the removal of the stake nets?—Yes.

Did the increase continue afterwards, or have the fishings since diminished?—The fishings have fallen off very much during these four or five years back.

To what do you attribute the additional decrease of fishing?—I think it is on account of the close time not being properly kept, and these nets on shore long after the season.

William Bell.

(May 10.)

Is the close time worse observed of late years than formerly?—It is no better.

Have these fishings on the shore been continued to a greater extent of late years than formerly?—They are more numerous within these few years, along the coast.

Has any attempt been made to put them down in close time?—Not that I know of.

Has any attempt been made to enforce the close time in the upper parts of the river?—No.

When does the close time commence on the Tay, and when does it end?—From the 26th August to the 10th December.

Do you conceive, from your knowledge of the breeding season of the fish, that is a proper period?—Yes.

You would not recommend any change of the period?—No.

Do you know of any difference in the quality of the fish that are caught in stake nets, and those caught in coble nets?—No.

Have you had occasion to see the fish that have been caught in the stake nets?—Yes; they are considered not so good as the coble fish.

Is their not being so good the consequence of being caught in the stake nets?—It is on account of being detained in the stake nets.

You do not conceive there is any difference in the quality of the fish, before they enter the stake nets, from those caught in other parts of the river?—No.

Have you seen roe or melt in the fish caught in the stake nets?—Yes, I have oftentimes; it is a long time since now.

What description of fishing nets, of which you have been speaking, are those upon the shore?—They are stake nets, and they remain during a great part of the close time.

Are you acquainted with any manufactories or mines, or works of any kind, on the Tay, or the rivers that run into the Tay, that you conceive to be prejudicial to the fish?—No.

In what places are the stake nets along the coast situated?—Some of them near Montrose; that is what I hear.

Did you ever see any of them?—No, I never was there.

Do you know any thing of the fishing on the river Tweed?—I did 25 years ago.

Do you know that the illegal practice of barring the river, by means of nets, during the Sundays, existed at that period?—I have heard of it, but I never saw it; but I believe it may be done.

Do you believe that such a practice existed?—I have reason to believe, that at that time it was done.

Thomas Proudfoot, called in; and Examined.

T. Proudfoot.

DOES your information, as a fisherman, apply to the river Tay?—Yes, the Tay and Earne; I am tacksman of Lord Wemyss' fishings on the Tay and Earne.

Where are those fishings situated; near the mouth of the river, or elsewhere?—The Tay, belonging to the Earl of Wemyss, commences two miles and a half below Perth, on the south side of the Tay; the Earne comes into the Tay there, and they go five miles up the river Earne from the mouth of the river.

How long have you been tacksman of these fishings?—I commenced tacksman in the year 1815.

Have the salmon fisheries with which you are acquainted, increased or diminished during that period?—They have decreased very much since the year 1820.

Has the fishery decreased throughout all parts of the river, or particular parts of it?—I think it has decreased in every part.

To what cause do you attribute the decrease since the year 1820, in particular?—To two causes.

State the first cause.—One cause is, there are a great many stake fisheries up about Montrose, which take a great many of the fish that would come into the Tay, and what they do not take they put off with long leaders; they are of such a length that they put the fish past the Tay.

Is that the only cause to which you attribute the decrease of the fish?—No; I think there is another cause, that is, that in our close time there is no proper

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(May 10.)

proper Act for detecting poachers; the Act is so very defective, that although you see a poacher working with a boat and net, unless you see them kill fish, there is nothing done to them.

The first cause that you have attributed the diminution to, is the stake nets; did that mode of fishing not exist before 1820?—Not to the extent it does now.

In what respect has the extent varied?—I understand they are putting up new fishings for the season in every quarter on every shore.

When did they begin?—I fished on the Tay when there were no stake nets at all, neither on the river or shores; I have been tacksman since 1815, but I have been a common fisherman 27 years ago.

Were there any stake nets at that time?—Not to my recollection.

Tell us when did you hear of or see them?—They are very plenty in the Tay; about the year 1811, they were to a great extent at that time.

You have stated, that the great decrease of the fishing has been since the year 1820; was there any perceptible decrease, previously to 1820, in consequence of the stake net fishing?—Yes, there was.

Have you any account specifying the decrease, or can you give the Committee such an account?—All that I can say about that is, that the scarcity of fish was immense, and the rents came down very low; Lord Gray's fishings I knew upwards of 3,000*l.*; then a lease was taken, for two years, at 2,400*l.*; that company had them two years; then Mr. Bell got them again at 1,205*l.* I think that was the lowest I ever knew Lord Gray's at.

And they are now let at that rent?—Since the stake nets went out they have got high again; after the stake nets went out, Mr. Bell got them, at a private bargain, nearly at 4,000*l.*; they are the principal fishing on the river.

When were the stake nets abolished?—I really forget the year.

Is it five years ago?—I think it is full that, nearly nine years; and above five years since the floating nets were put out.

Then how comes it, if the stake nets have been abolished five years ago, that you attribute the great decrease in the fishing since 1820 to have arisen from the stake nets?—I think the fish that come along the coast come to the Tay; the fish spawn in the Tay, and the sea washes them back to the same river.

What you mean to say is this, after the stake nets have been put down in the run of the river, they have been established along the coasts leading to the run of the river?—Yes; that is what I mean.

Can you give the Committee any information of the proceeding which led to the abolition of the stake net fishery in the river?—It was decreed in the house of peers, or court of session, that they were to be put out.

How comes it, that the stake nets along the coast are equally as destructive to the fish, as the stake nets running in the course of the river?—It is generally supposed that they keep along the shores, the salmon coming into the rivers.

Are you of opinion that fish bred in a river will endeavour to return to that river again?—I really think so, on account of the weight of fish in the Tay; they are rather above what I have seen in the Tweed.

And are you of opinion that the salmon which are caught in these nets along the coast are running for the river Tay, for the purpose of going up the river?—I think so. My reason for it is, that the stake nets being placed along shore to the eastward of the mouth of the Tay, there is the same weight of fish caught there that is in the Tay, near about the average weight.

Is there any thing in the appearance of fish in one river, which makes you distinguish it from fish belonging to another river?—Yes; there is a small river that runs into the Tay, which they call the Isla, and that fish we can distinguish. We have an idea, that when we get small fish below Perth it is an Isla fish, on account of the smallness of it. All the fish caught in the Isla will not average 8lb. The Tay averages from 12lb. to 14lb. Some years back it is my thought there was a great deal of heavy fish killed.

Is there any thing in the colour or shape of the fish besides weight, that makes you know the fish of one river from another?—There is very little difference in colour.

Any in the shape?—The Isla fish is small, but I will not take on me to say we can decide on the colour.

If you met with an Isla fish or a Tay fish in the firth, would you know the one from the other?—No; I would not.

T. Proudfoot,
(May 10.)

You stated that Lord Gray's rents, previous to the stake net fishery, were as high as 3,000 *l.* a year; they afterwards fell by degrees to 1,205 *l.*; and you said, after the stake nets were put down, that they rose to 4,000 *l.* a year; I should like to know in what part of the river or in the frith Lord Gray's fisheries are situated?—They are situated a full mile below Perth. The upper part of Lord Gray's fishing commences at a mile below Perth, on the north side of the Tay. Then they go along the north side of the Tay all the way, full three miles from the upper part to the lower.

Then it communicates with the frith?—The frith is a long way below that.

It extends three miles?—Thereabouts.

What is the present rent of Lord Gray's fishings?—The present rent is not 4,000 *l.*; Mr. Bell has got a lease lately, and I think it is between 3,500 *l.* or 3,700 *l.*

Lord Gray's fishing being river fishing, I want to know, when you say the stake nets are now put down in the course of the river, but are rendered still more destructive by being carried along the coasts leading to the river, how it happens that Lord Gray's rent is now almost higher than ever it was before, when the other parts of the river have fallen off so much?—I cannot say the stake nets on the coast have done so much evil as when they were in the river; but I attribute the scarcity of the fish so far to them.

Can you tell how far Lord Gray's fishing is from the mouth of the river?—I could not exactly tell the number of miles.

Is it 20 miles?—We count it 20 miles from Perth, by land, to Dundee; but I could not say exactly by the river. I suppose the river is full more.

Will the witness have the goodness to give us some information, as far as his own experience is concerned regarding his own fisheries, as to the decrease that has taken place in it?—It has decreased very much since the year 1820.

Give us some information since the time you commenced your tack in 1815?—In 1815, 1816, 1817, and 1818, it was a tolerable fishing, and the year 1819 was rather inferior with me; perhaps it might not be less with some; and since 1820 we have had regular bad years successively.

Does the witness not find that the variations of seasons have a great deal of effect on the produce of the fish?—There may be reasons that I can give no account for; in the breeding time, if the water is little, it is the best time for spawning.

Is the witness of opinion the variations of seasons have a considerable effect on the next year's fishing?—Yes. The reason I give for that is, that when the water is very high, it carries them up small streams, in which many small ones die; and perhaps if it is dry weather at the time they come to life, they are left there. If there are not large rivers in proportion to carry them down, they may be lost.

Have the seasons since 1820 been as favourable for the breeding of the fish, as they were previous to 1820?—For the two last years they have not been so good; they have had heavy floods.

Has the diminution in your fishery been greater in the two last years than in the year 1821?—Yes, it has.

Then you are of opinion that the nature of the two last seasons may account considerably for the diminution in your fishing?—I suspect it might have an effect to hurt the fishing. I am fully of opinion that if they go far up with heavy floods when they spawn, if the floods are not equal when they come to life, they are lost.

Do you consider the occasional speats in the river to be equally injurious to the fishing with the stake nets and the poaching in close time?—As to that I cannot say whether it may be equal or not. I only suspect it may be the cause of diminishing the number of fishes.

Do you consider that speats or floods are injurious to the fishing?—I think so, in the time the fish spawn.

Do you think the rainy season, when there are frequent floods, is likely to be a better fishing season than a dry season?—In rainy seasons, in heavy speats, the upper fisheries give more fish in proportion when the river is high than when it is little.

Does it consist with your knowledge, that the diminution of salmon in the river Tay has arisen from the practice of stake nets and from poaching in close time?—Yes, that is my sentiment.

T. Proudfoot.
(May 10.)

Is it your knowledge?—It is my full opinion it is the case.

And the other is your suspicion?—Yes.

You have stated that fish are very often left altogether after spawning, in consequence of small rivers falling very low, having ascended very high by means of floods; do you apply this to the young fish as well as the older fish?—When they go up into some place it kills old and young; the old are killed before they go down to the sea. The fish that go up to spawn, a greater part are destroyed before they get down.

This observation of yours does not apply to the salmon fry?—If the salmon fry is left there they cannot come to life.

The second cause to which you have attributed the diminution of the fish in the Tay, I think you have stated to be the defective state of the law?—The Act of Parliament is so very weak as I have mentioned before, that unless you actually see poachers kill the fish you cannot get at them.

Will you state the remedies you would suggest to the present state of the law?—Unless the close time is better guarded, the proprietors cannot expect the rents that they have, and they will soon get the whole of the fishing into their own hands.

Do you know if many prosecutions are instituted against poachers under the present law?—Yes, there are a great many summoned to Perth, but there is little done to them; they merely get off for a very small fine; I think 16*d.* or 18*d.* Scots money.

How happened they to get off so easily; are the magistrates unwilling to enforce the law?—This is the reason; for the first offence they get off for this money; on the second offence the fine is doubled, which is a mere trifle both of them: I think the third, when it is put in execution by the Scots law, is imprisonment and banishment.

Which is too severe?—There are many banished for less crimes.

Besides those persons who are considered poachers, are there any others who destroy the fish in the river?—There are a great number who get liberty from gentlemen to go to fish; they say they ask liberty of the proprietors. I have seen a great deal of gentlemen, some half-pay officers, fishing with rods in the Earne and Tay likewise, and killing salmon; they are rather the lower orders. They pretend in Scotland that they have always a right to fish for trout, those fellows who go about with rods. It is a very great hardship to the tenants who pay heavy rents to the proprietors on the Tay and Earne, that we dare not wet a net after the 26th of August; and such men as these are always going about killing fish in close time, pretending that they are killing trouts.

Then you attribute a great deal of the mischief to the persons who follow the rod fishing?—Yes, I do. I will give you an instance, which is a strong one, which I know to be true. I know some of these low characters in Perth, who go in the day time with rods, and come in the night time with nets where they see the fish, and pull and kill them, pretending all they want is merely to see where the fish is lying. I know that as a fact.

The witness will now state on what day the close time commences and ceases on the river Tay?—The close time commences on the 27th of August, and continues till the 10th of December.

Would the witness suggest any alteration in the close time, as advantageous for producing a greater plenty of fish?—With regard to the Tay, I know that the time of commencing, the 10th of December, is very good; there is a great deal of good fish killed by the time we commence the season; I have seen the fish, particularly the female, beginning to get very large by the 26th of August.

Have you any suggestions to make as to the time of the cessation of the fishing?—No; I think it is very right that the fishermen in the Tay should stop on the 26th of August, and allow the fish to go up to spawn. Fish go to spawn with the roe which produces the fry, very large at that time.

Do you conceive that, in general, the law, as to close time, would answer all rivers?—I am far from that opinion.

If it were proposed to make a general law, opening the rivers on the 10th of January and closing them on the 10th of September, do you think that that law would be inapplicable to the Tay?—Indeed I think so.

Will you state to the Committee any observations you have to make, as to the most suitable time for the close time on the river Earne?—With regard to that all

T. Proudfoot.
(May 10.)

all I have got to say is, that the Earne is an inferior river to the Tay, and in the spring of the year the fish always occupy the north side of the Tay. The north side fishing kills far more fish than the south side; and I am of opinion I have seen the she fish go up the Earne as big with roe at that time as in the Tay.

The Earne runs into the Tay on the south side, and the fish run up the north side of the Tay, and therefore they do not take it so early; the fish are as far advanced with regard to spawning at that time in the Earne as in the Tay?—Yes.

Is there much salmon fry destroyed in the river Tay?—A great many men go about with rods, and they kill a very great deal; boys and men going about, after they come to life. The fry is a great deal taken with rods.

Are there any artificial works, mines or manufactories on the river Tay, that, in your opinion, injure the propagation of the salmon?—None that I know of, Sir.

Can you give any information with regard to the rivers northward of the Tay?—No.

Martis, 11° die Maij, 1824.

HENRY HOME DRUMMOND, ESQUIRE.

IN THE CHAIR.

Mr. *James Bell*, again called in; and Examined.

Mr. James Bell.
(May 11.)

YOU have stated in your evidence yesterday, that the stake nets are very injurious to the upper fishings; state your reason?—They are put along the shore; and fish lead generally along the shore, seeking out for their own rivers.

What becomes of these fish?—Those that are killed cannot get to the river, and those that are not killed go back to the sea.

Those which are not killed you consider go back to the sea?—Some may, and some may not.

Do you know this from your own personal observation?—Yes, I do.

Have you seen the fish going back?—No.

Then it is all guess?—We judge from experience.

You have stated, in your evidence yesterday, that the upper fisheries of the river fell off very much while the stake nets were fixed in the Frith of Tay, and that your fishery has improved since?—Yes.

Have you kept regular accounts of the quantity of fish caught in the upper part of the river?—That belongs to myself.

The part that you rent?—Yes, certainly.

Can you produce to the Committee, for a certain number of years, the number of fish caught, which would show the Committee when the increase and when the decrease took place?—Yes, if I was at home I could do it; and I would send it up on a short notice.

How far back could you go?—Seven years, perhaps.

Can you go back to 1809?—I cannot do that.

I believe you stated yesterday, that, among other causes for the decrease of the fish on the river Tay, you considered the stake nets placed near Montrose one?—All the way along the coast, from Arbroath to the mouth of the river.

You have just now stated, that fish are looking out, going along the shore, for their own rivers; are there not two rivers nearer Montrose than Arbroath?—Perhaps there may be; we reckon all fish look out for their own river.

Do you not know the North and South Esk salmon rivers?—Yes.

How can you then suppose, the stake nets between Arbroath and Montrose can injure the Tay fishing, when you know that there are two rivers, within a few miles off, where these stake nets are placed?—Fish take their own river; the Aberdeen fish is quite different from the Tay; different in the scale.

Are you still of opinion, that the stake nets between Arbroath and Montrose are injurious to the upper fishings of the Tay?—Those which are nearest the Tay must prevent the fish from coming in.

Do you yourself know any thing about the stake net fishery?—Yes, I do.

I had

Mr. James Bell.

(May 11.)

I had a concern in a stake net fishery with Mr. Halliday and Mr. Little; when they had Sea side fishing, I had them for two or three years in great quantities.

During the period of the stake net fishing at a place called Sea Side, did you purchase the fish of Mr. Little?—Mr. Halliday, I think.

I believe you stated yesterday, that you considered the fish taken by the stake nets, for some particular reasons, not so good as those taken by the coble?—I think so, and I am clear of it too.

State again your reasons for saying so?—Because the fish killed with the net and coble come in quite clear. Fishes taken in the stake net fly about very much when the water has gone from them, and they swell a good deal; they are drowned, part of them.

Then you think the fish caught by the stake net is not of so good a quality as that taken up rivers?—Equally as good, if they are taken well with the net; but the water must be away, and the fish flutter and heat themselves very much.

Have you ever been in the habit of seeing the fish taken out of the stake net?—Not much. I was in the habit of getting the fish, and used to complain very much; some of them died on the dry sand.

You have stated, that you were in the habit of purchasing fish of those people who carried on fisheries at the sea side; were these fish then brought up to Perth, again sent down the river, and from thence to London?—They were brought up to Perth sometimes, and bought at another time in carts.

Do you, from your own knowledge, know whether any proportion of what you call black fish, are taken in the stake nets?—I know nothing about them.

Do you believe there is any quantity of black fish in the stake nets?—No.

From the beginning of your season, when the fisheries begin on the Tay, do you or do you not catch a great many black fish?—No, we do not; the fishermen have orders to set them all in.

Do the fishermen catch many, and set them in again?—Not to my knowledge.

Then you mean positively to say, there is no proportion of black fish taken out by the beginning of the season, by nets in the river?—Nothing in proportion to the clean fish.

Are you in the habit of seeing your own nets employed and drawn?—Often I am.

Then you have very seldom seen any black fish?—Very seldom; I am generally down amongst them once a day.

Have you at any time purchased any black fish out of season?—No; sometimes one or two, but no more; not above two or three in the season; formerly they have killed it, but now they are prohibited.

How do you account for not catching black fish in the same net you catch the clean fish?—The black fish go down the river, and they get down before the nets are closed; the good fish are coming up.

The black fish then are behind the net?—They are coming down the river when there is a speat? they are coming down behind the net, or get away before the nets are closed; the clean fish are coming up the water.

Then when you do catch any black fish, the fishers have orders to turn it in again?—Yes; some years ago, it was a perquisite for the fishermen to keep these black fish.

How long has that practice been given up?—Some years; three or four years, perhaps.

Do you fish in the night time?—Yes.

Then when a black fish is caught in the night time, it will be impossible to distinguish him from a clean fish?—They can easily see him; he is quite a different shape; out of season fish has no life in him hardly.

You had generally stated, that the fisheries fell off during the continuance of the stake nets in the river Tay; and that since that you consider them injured by stake nets at a greater distance; can you state to the Committee, what has been the fishery on the river Tay for the last three months?—I could give you back a good way.

Has it been good or bad?—It is middling this season; three years back it has been bad.

I want to know what it has been this year?—It has not been a good fishery.

Is it much better than last year?—It is a little, not much.

Is it better than the year before?—Not so good, nothing like it.

Mr. James Bell.

(May 11.)

This statement of yours, with respect to the damage done by stake nets, is matter of opinion, not from your own personal knowledge of the stake nets?—Only from my own personal suffering.

Is it from your own knowledge that you give that opinion, or is it merely a general opinion, a sort of hearsay?—It is certainly a general opinion; it is my own positive opinion, that the fish has fallen off very much.

Do you know any thing about the Tweed fishery?—I do.

Have the fish fallen off in that river?—They have.

What cause do you assign for that?—One cause of it is a new pier; there has been a large pier built there within the last two years, and the scarcity has been very considerable.

You do not attribute the falling off of fish in the Tweed to stake nets?—No, I do not.

Then you believe the fish may fall off in any river, without the evil of stake nets?—They may.

Do you not know they do?—There has been a general scarcity.

Then why do you attribute the scarcity in the river Tay in a great measure to the stake net fishery, when you know that other rivers have fallen off without having any stake nets near them?—The Tay has suffered more than any place; particularly in the spring, they kill all the brood fish.

Do you know from your own knowledge, that the fishery on the river Tay has fallen off more than on the river Tweed?—I could not say; I am only there occasionally; I am tenant there; I rent 1,000*l.* a year there, and better; they have certainly fallen off in the Tweed.

Has it fallen off more than the Tay, or less than the Tay?—I can only speak for the Tay.

Has that one fallen off nearly as much as the other?—I can only speak of fishing of my own; it was very bad last year; this year it is looking better.

Has the fishery with which you are acquainted on the Tweed fallen off as much as your fishery on the river Tay?—Indeed I think it has.

Is it not within your knowledge, that the fish have not made such an appearance in the bay of Berwick last year, as they have formerly?—I am never there in summer.

Did you never hear from any of the fishers, from your namesake, that it was the practice for the salmon fishers to go off into the bay to see if the fish were there?—No.

Then you cannot speak as to the fish making their appearance?—No, I cannot.

You never was told that such was the case by any salmon fisher?—I have heard say there was an appearance of fish in the bay, but I never went to look for them.

Did you never hear this year of the bad appearance in the bay?—No; I have often heard them come in and say, There was a great appearance in the bay, when there were very few.

You said, that it is your opinion, that the stake nets have certain effects on the upper fishing; is that opinion in your mind so strong, that if you were told beforehand that the stake nets were to be established in the river, you would give less rent for the upper fishing that year?—Certainly; if they were established in the river, I would give a great deal less.

During the time that you have been tenant of fishings in the Tay, have any changes taken place with regard to the mode of fishing those upper fishings, where the stake nets are not in existence?—There was no change; but three or four years ago they had nets, and they have all been done away with these seven or eight years.

I wish to know whether you have used the old modes of fishing more frequently and constantly than formerly?—Very constantly; yes, I think there are more killed now; the fish is more valuable, and the rents are high.

Do you fish more in the dark; in the night time in particular?—We always do.

As far as you know, are all the upper fishings more constantly fished now than formerly?—Generally, as I think; in certain places they fish them as much in the night as they do in the day, and we often get more fish, particularly if there is clear weather.

Mr. James Bell.

(May 11.)

You have answered a number of questions with regard to black or foul fish; I want to know whether, towards the close of the season, there are a considerable number of red fish caught?—Some of them may be getting a little grey, but very few of them.

Do you know if any considerable number of them are caught in the stake nets?—I do not know what is taken.

Is it consistent with your knowledge that they might be taken?—They might be taken.

From your own knowledge, do you know they are taken?—Yes, I do; they are the very same fish that are coming up to us, and the fish are more pregnant if they are kept in the sea water.

What proportion of fish that you catch in the latter end of the season are full of roe?—I think there is more fish full of roe than males; more female fish than males; some are forwarder than others, but all are full of roe and spawn.

The fish caught at the latter end of the season are more or less in spawn or roe?—That is the case, certainly.

In your evidence yesterday, you stated that you considered one of the causes of the decrease of salmon to be the number of fish killed in close time; have you at any time fished in close time?—No, never.

After the 26th of August?—No; I never knew a fish to come up after the 27th.

Did Mr. Richardson ever interdict you from fishing at any time?—No.

Did your men fish after the season?—I do not know.

You never heard then any complaint against your men for fishing in close time?—There was one season that I was at Aberdeen when the tide came up, and they told me they had been fishing a day or two, and had been interdicted; I said, "You had no right to fish;" I gave them no orders. There was something of that kind took place, and we gave it up at the moment.

How many days do you say they fished?—I do not know; it was one day.

Did they fish a week?—I cannot say a week or a month; when I came home they told me they had gone to fish for a few days, and they had been interdicted.

They were obliged to stop?—The lad is here, and he will tell his own story.

Are you certain they did not carry on the fishery for three weeks after?—I am perfectly certain I never gave a servant orders to carry it on one day after the 26th of August.

I wish to know whether, in fact, your servants did or did not fish for three weeks after the 26th of August?—I knew nothing of it; I never heard of it.

What year was this that you was at Aberdeen?—I can easily get that when I go home.

Was it last year?—No.

The year before?—I do not know whether it was or not; it is not above a year or two since it happened; they never fished above a day or two.

What became of those fish caught after close time?—I never saw them.

Have you any return of the number of fish caught after close time?—No; the men may fish for themselves.

Were those fish sold to your common customers, or not?—Not that I know of.

Were they thrown away?—I never saw them at all; I did not know they were taken.

Do you mean to state to the Committee, that you had no profit for those fish caught by your men, while you was absent at Aberdeen?—No, I had not; I received nothing to my knowledge; the fish continues in the house two or three days before they go away, and I had no fish there.

Was there any fish caught afterwards?—Not that I know of.

Who manages your business in your absence?—We have a foreman who manages the fish; I manage the shipping them myself.

When you are absent from home, do you leave a confidential person to manage your business?—I am never from home above two or three days.

What is the name of the person so intrusted?—It is Pringle.

How long was you absent when you was at Aberdeen?—Not a week, at any rate.

Then you are quite certain they did not fish for three weeks after the 26th August?—I never heard of it.

Who

Mr. James Bell.
(May 11.)

Who is your agent in London?—I have several agents. I have two sons here in London.

Were any of the fish you sent up to the London market in the early part of this season, seized and fined by the Lord Mayor?—None of mine, that I know of; I never heard of it. I do not think it was so.

William Bell, again called in; and Examined.

William Bell.
(May 11.)

IN your evidence yesterday, you stated that you considered the decrease of the fish in the river Tay, owing very much to the stake net fishery?—Yes.

Is that from your own personal knowledge of the stake net fishery?—Yes, it is from my own personal knowledge.

Are you particularly well acquainted with the stake net fishery?—I have seen them often.

Did you ever fish any of the stake nets yourself?—Never.

You stated, I believe, yesterday, that you considered that the stake nets between Arbroath and Montrose were detrimental to the river Tay?—Yes, on the coast.

Are there not two salmon rivers nearer those nets than the river Tay?—I believe there are; the North and South Esk.

How far are these stake nets from Perth?—I do not know.

Are they 50 miles?—I could not say.

You consider the salmon run along the shallow water to find out their own rivers?—Yes.

Then do you think it probable that, with the North and South Esk, nearer these stake nets that are now fished, the fish caught in these nets are Tay fish and not belonging to these two rivers, the North and South Esk?—I think there may be the Tay fish there.

That is merely matter of opinion?—Yes.

Suppose stake nets, at an equal distance from Perth, on the coast of Fife to Ely, were put up; do you think that would be injurious to the Tay fishery?—Yes, it might.

Then do you think the stake nets in that situation must injure the Tay fishery?—Yes, I think they must.

State your reasons why?—I think the fish that come near the shore may be taken by the stake nets; the fish coming that way may be caught.

Have you ever seen any of the fish taken in the stake nets now in existence on the coast?—No.

Then it is merely matter of belief, that they are Tay fish, on your part?—Yes, Sir.

You do not know it yourself?—No.

At the beginning of the season, in the early part of your fishery, did you catch in your nets many foul fish?—No, very few. I have seen foul fish at a time.

How many may you catch in the course of a day and night of foul fish?—Sometimes none at all; very seldom.

Then at the end of the season, are almost all the fish you catch either full of roe or spawn?—Towards the end of the season some of them are very full.

Are they not all more or less in melt or roe?—Yes, they are all in melt and roe.

For how long before the close time is that?—About eight or ten days. Some towards the end of the season are very full, but there is a great deal of good fish among them.

I believe you stated that you considered one cause of the diminution of the salmon in the Tay, to be the killing of fish out of season?—Yes.

Have you, or the fishers over whom you are foreman, ever fished out of season after close time?—We generally give up on the 27th day of the month.

Have you ever gone on after the 27th, and fished?—About two or three years ago we fished a day or two after the time.

Were you interdicted from fishing by Mr. Richardson?—I heard of it, but I was not interdicted; I heard of it.

How many days did you fish?—One or two, or three.

What became of these fish?—They went to the fish yard.

And were sold with the others?—I do not know what was done with them.

Were

William Bell.
(May 11.)

Were they thrown away?—I do not think that.

Are you sure that you fished for three days, or did you fish for a week or a fortnight?—I do not think we fished three days. I am not exactly certain whether it was two or three.

Are you quite certain you did not fish for a week?—Yes, quite certain.

Did you last season, after Mr. Bell had given up fishing, yourself fish at Orchard nook, and catch 26 salmon and gilses?—No.

Did you fish at all?—Not at all.

Are you quite certain?—I am certain.

Did you ever at any time take your wife and daughter a fishing?—No.

Never had them in the boat?—I never had them in the boat.

Did you not state yesterday, that different fish have their own waters?—Yes.

You stated in your evidence just now, that you thought the Tay fish came into the frith of Forth in the stake net fishery and Largo bay?—Yes.

Are there not rivers in the frith of Forth such as the Leven; and do not you think that the fish coming into Largo bay would be the Leven fish?—They might be both; I know that the Tay fish is driven to Leven.

Small fish?—Yes.

Where do you think the salmon come from; where do you think they winter?—I believe that is a mystery.

What do you suppose?—I believe they come from the north.

Thomas Proudfoot, again called in; and Examined.

T. Proudfoot.

IN your evidence yesterday, you stated that you considered the diminution of fish in the river Tay very much owing to the stake net fishery?—Yes, I did.

Is that evidence you gave, from your own personal knowledge, or merely a general opinion?—I never saw the stake nets between Tay and Montrose, but our fishing has declined very much since they commenced there; wherever fish is spawned, they wish to come to that river again.

You stated yesterday, that you considered the stake nets between Arbroath and Montrose prejudicial to the Tay fishery?—I think so.

Are there not other salmon fisheries much nearer those stake nets than the river Tay; are there not the North and South Esk?—I believe so; I never was there.

How far do you think the stake nets now in this sea are distant from Perth?—I never went round the sea coast; I am at a loss to tell.

Is it 50 or 60 miles?—I could not say.

Do you consider that the Tay fish are caught in these stake nets, and that they are not the fish of the North and South Esk?—We cannot tell the number of Tay fish caught there; the Tay fish and the North and South Esk may come along the shore together; but I fully believe in my own mind, there may be and are fish in those nets that would come to the Tay.

Suppose stake nets were placed on the coast of Fife near Ely, which is some distance from Perth, do you think that would be prejudicial to the Tay fishery?—There are fewer fish in that quarter; we always suspect that most fish that come into the Tay come from the north-east coast; that is our decided opinion.

You have stated, that there has been a gradual decrease of fish in the river; will you state to the Committee what sort of a season it has been in the river Tay for the last three months?—In the last three months there was a week's good fishing, but only one week as yet.

How is this season in proportion to the year before and the year before that?—I believe that this season there is more fish caught in the Tay as yet than last season.

You rent a considerable fishery in the Tay?—The Tay and Earne.

What length of your lease is there to run?—Only one year after this; and perhaps this will be the last, our fishing has declined so much.

How long have you rented a fishery on the Tay?—I commenced in the year 1815.

Had you before rented a fishery?—As a fisherman; yes, I fished on the Tay 27 years.

Then do you recollect the year 1804?—No; I could not call my memory to the year.

T. Proudfoot. (May 11.)

Do you recollect that there was an interdict on all stake net fisheries that year which was afterwards taken off?—I believe there was; with regard to the year I forget what year it was.

You do not at all recollect the number of fish caught that year, by any of the returns?—No.

Do you recollect the number of fish returned caught in 1804, to be 11,732?—I am quite ignorant of that.

The next year do you recollect that the stake nets were restored?—I cannot recollect the year.

You likewise stated yesterday, that you considered one of the causes of the decrease of salmon to be killing fish in close time?—That is a great cause of the decrease.

Have you ever known any fishers continue to fish after the 26th August, which is close time in the river Tay?—I recollect one season, I think two or three years ago, that they took it upon them to fish two or three days after the 26th August, and there was an interdict came from Perth to stop them; it was the 29th, and we dropt it that morning.

Lunæ, 24° die Maij, 1824.

THOMAS FRANCIS KENNEDY, ESQUIRE,

IN THE CHAIR.

Mr. *John Johnstone*, called in; and Examined.

Mr. John Johnstone. (May 24)

WHERE do you reside?—I reside principally at Balmerino, near Dundee, but I am in different places now and then.

Are you engaged in the salmon fisheries of Scotland?—Yes.

How long have you been engaged in the salmon fishery?—From the season 1799 up to this period.

Of what rivers, friths and stations on the sea coast have you had experience?—Of the rivers Annan, Nith, Esk and Eden, in the Solway frith; the frith of Forth; the frith of Tay; the Murray frith; the Dornock or Tain frith; the Cromarty and the Beauly friths; some call it the Inverness frith; and I have been upon the coast of Ireland, the river Bann, Lough Foyle and rivers, and the river Bush and the coast there.

Be so good as to state to the Committee, during what periods you have had experience of these fisheries?—From Whitsunday 1799 to the end of 1807 my experience was of the Solway frith and rivers connected with it. From that period up to the present it has been on the Tay principally, occasionally at the frith of Forth. From May in 1813 I have had experience on the Murray frith and rivers connected with it, excepting last season; I was not there last season nor this. In part of 1819 and part of 1820 I was upon the coast of Ireland and the rivers there.

Did you ever make any survey of any of the friths or any part of the open sea coast, with reference to the salmon fishery?—I was appointed to make a particular survey of the friths of Cromarty, Dornock and Beauly or Inverness, and have been all along the east coast of Scotland.

You state you were appointed to make such surveys, by whom were you appointed?—By the creditors of Mr. James Grubb, who held these fisheries.

Did that survey extend merely to these friths, or to any others?—To the Dornock, the Cromarty and the Beauly.

Did it extend to any part of the sea coast?—Not to the sea coast; it was only to these friths and estuaries.

Is the Committee not to understand, that you have made surveys of parts of the sea coasts of Scotland, with reference to the salmon fishery?—Yes, for my own information I have, along the east of Scotland.

Be so good as to state what the fisheries are in which you are at present concerned?—Upon the Tay, on the north side there are, in the frith of Tay, the town of Dundee fishery, Mr. Mylne of Mylnefield's fishery, Mr. Paterson of Castle Huntley's, Mr. Hunter of Seaside's fisheries: then on the south side of the Tay there are Lord Dundas and Mr. Wedderburn of Wedderburn and Birk

Mr. John Johnstone.
(May 24.)

Birk Hills fishings, the Hon. Archibald Stewart of Balmerino, Mrs. Morrison of Naughton, and Mr. Wedderburn's fishings of Wormit: then in the Murray frith there are the property of the Earl of Seafield, along the coast of Banffshire, Sir James Gordon's, on the same coast, Misses Stewart's of Tanachie, Mr. Young's of Burghead: and on the north side of the frith, part of the Marquis of Stafford's fishings.

Have you had occasion to attend to the propagation and habits of the salmon?—I have, in the lower parts of the rivers and friths with which I have been acquainted.

In what places do the salmon spawn?—Generally in the upper parts of the rivers, generally above the influence of the tide; although they may spawn where the tide reaches, yet it is oftener in the shallow fords and in the small streams connected with the larger ones.

At what time of the year do the roe and melt appear in the salmon, and at what time do the fish become full and ready to spawn?—The roe and melt appear in the month of May, and sooner, particularly the roe, but it is very small at that time.

Do you apply that to all rivers, or to any rivers in particular?—All rivers with which I am acquainted.

To salmon in general, as far as is within your knowledge?—Yes.

At what time do the salmon leave the sea and ascend the rivers for the purpose of spawning?—From the month of July onwards, in August, September and October, generally.

Are there not many salmon which leave the sea, and go up the rivers in the spring and summer months?—There are.

Do these fish all remain in the rivers until the ordinary spawning season, or do they go back to the sea?—I consider those that go up in the spring would go back to the sea, if they were not detained by droughts, so that they cannot get over the shallows.

State your reasons for supposing that they go back to the sea?—I consider they would get so much exhausted by being in the fresh water, that they would require to go back to the sea to recruit their strength, for the purpose of spawning.

Are there any other reasons upon which you found your opinion?—They get infested with worms or maggots in the gills if they remain long in the fresh water, which I think would kill them in the end, if they did not go back to the sea to get clear of these worms or maggots.

What do you conceive to be the object which induces the fish to visit the rivers at these early periods?—One evident object is, to get clear of the vermin termed the sea louse, which infest them sometimes when in the sea, and which leave them when they get into fresh water; and they come in search of food also, for there are a great many worms on the banks of the estuaries, and on the banks of the rivers.

When the salmon are subject to this insect in the sea, are they not in the highest condition?—Yes.

You have stated, that the salmon in going up the river early in the season and in the month of May, have a small quantity of spawn in them; do you consider that these fish going up the river, and not returning to the sea, spawn inthe river at that period of the year?—No.

Do they then come down to the sea with the spawn in them?—Yes, I consider they do.

Then you consider that the salmon only go up the river to spawn in the autumn months?—Yes.

Have you ever seen any salmon descending the river with roe or melt in them?—Often.

You mean to say you have caught them, or seen them caught?—I have caught them and seen them caught.

Do you conceive these same fish return in the autumn again?—If they are not killed, perhaps these same, or some others, would return again to the spawning ground.

No fish breed in the open sea?—I consider they do not.

Upon what evidence do you say that these fish were going down the river?—By seeing them, and catching them going down.

Mr. John Johnstone.

(May 24.)

How do you know they were going down?—I saw them swimming down, going for the friths.

Were these fish diseased, or not?—Some of them were diseased, and some not.

I understood you to say it was disease made them go down?—Yes, from the upper parts of rivers; but some do not always go high up; they had not been many days in the river; they could not get over the fords for want of water.

Then there are other causes besides disease?—Seeking their food, for any thing I know; these are causes I cannot speak to from my own knowledge.

At what time do the salmon deposit their spawn?—Principally in the months of November, December and January, but some spawn at other periods, but very few; principally in these three months.

Is it deposited in furrows in the gravel?—Yes.

Describe the process of depositing the spawn?—The process I believe to be, that the male and female meet together upon the shallows, and that one or both of them assists in making the furrows, and that they deposit their spawn, and cover it up with the gravel.

At the time the fish make these furrows in the gravel, is not the male fish formed apparently for that purpose?—He is formed very strong, apparently for that purpose; he has a large beak upon his mouth then.

What becomes of the parent fish after spawning?—They stop a considerable time in the rivers, and then return to the sea, if they are not prevented by nets, cruives and dam dikes, or such obstructions across the river.

During what periods are they generally found in the river after spawning?—They are found during the months of January, February, March and April; and I believe some are found in May, but they get very scarce then.

The Committee are to understand that you are speaking of the parent fish after spawning?—Yes.

At what time do the young fish rise from the gravel, come into life, and begin to go down the rivers?—I consider that they rise into life in the months of February, March, April and May, principally in March.

Can you describe the progress of the young fish or fry, as you may have seen it in the frith of Tay?—I never saw any in the frith of Tay.

In any part of the river Tay?—I never saw any fry in the river Tay.

Can you answer the question with reference to any other river?—I have seen immense quantities in the river Annan.

Be so good as to state what you have observed as to their progress towards the sea?—I have observed them keep the side of the river; they go into mill leads or dams, and seek their way to the sea by easy water till they meet the tide, and then they seem to halt for a considerable time; then they recede from the banks and take the deep water, and go down to the sea in that way, generally speaking.

At what season do you consider that the salmon fry have generally reached the sea?—They have generally reached the sea in the month of May.

The last of them?—Generally; some reach it in June, a few.

The great body you consider proceed to and have reached the sea in May, beginning some time in March?—Yes.

Do you possess any knowledge of the number of ova in the roe of a salmon?—I do.

Be so good as to state what you consider to be the number contained?—It varies very much with regard to number; it is from 13,000 to 26,000; I have counted them repeatedly; they are from 18,000 to 20,000 upon an average.

Be so good as to state the manner in which you have acquired this information?—By boiling the roe, allowing it to cool till it got hard, counting as many as would fill a certain measure, and then measuring the rest; some of them I have actually counted one by one, every hundred.

Do you believe that each of these ova produces a young fish, if it be not injured, or prevented from coming to maturity?—I consider, that if it is impregnated by the substance of the male, the melt, and that if it was not destroyed in any way, it would come to maturity; I see no reason that it would not, if it was not destroyed.

Do you believe, in point of fact, that spawn is frequently deposited which is not impregnated by the male?—I think it is a possible case, I could not answer positively.

Can

Can you state any circumstance on which you found your opinion?—No.

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What was your object in making this investigation? — At that period, Mr. John Little of Newby, to whom I was then an apprentice, was writing on the subject, upwards of 20 years ago; and in consequence of writing upon it, he desired me to count them; he wanted to ascertain the number, and he made me count the roe of several salmon, grilses and trouts; he wrote a good deal on the subject, and that was the cause I had occasion to count them; it was by his desire.

Are you acquainted with the fish known by the name of herlings, whitings, whitelings or finnocks?—Yes; I consider that all these names apply to the same fish; that it is only the name they get in different places, local language; they are called herlings on the Scotch side of the Solway; they are called whitings on the English side; they are called sometimes herlings and sometimes whitings or whitlings, at Berwick; they are called whitelings in the Tay, and finnocks in the north of Scotland.

Are they plenty in the Solway frith?—Yes.

In the frith and rivers falling into the Solway?—Yes.

Are they plentiful also in the Tay?—No, they are not.

But they exist?—I believe they do; I never saw any.

Can you describe the fish which goes in different parts of the country by a different name, but which you consider one and all to be the same fish?—Yes, it is a small fish, weighing about four ounces; from 12 to 18 inches in length, I believe, although I never measured them; it is very like a young salmon.

At what age of the salmon is this fish similar to it?—To a young salmon of about a year old.

Do you know any thing of a fish, called in some of the rivers a laspring?—No.

Do you consider that this fish is a young salmon?—No, I do not.

Do you consider that the fish known by the name of whiteling, is a young salmon?—No.

What are your reasons for believing that it is not a young salmon?—My reasons are, that they are found with melt and roe; they enter from the sea, and are found going up the rivers to spawn; they are also found going down as kelts; they are very numerous in some friths and rivers, and in others are very scarce, although the salmon are plenty.

You say that they are found going down as *kelt*; in what way would you describe the fish when it becomes what you term a kelt?—By a "kelt," is meant a fish which has recently spawned; it is very thin; it gets very much discoloured; it is very long in comparison with its thickness; the head is large; the fish is quite out of season; the fish then cuts white in general.

What is the size of the whiteling?—It may weigh four ounces to half a pound, so far as I recollect.

Are they found in all rivers, in numbers corresponding at all to the number of salmon which exist in the rivers?—No; they are not.

Do you infer from that fact, that they are not young salmon?—Yes; that is one of my grounds of inference.

Do you consider the grilse to be a salmon not full grown, or is it a different fish?—I think it is a different fish.

Be so good as to state your reasons for that opinion?—My reasons are much the same as I gave for the herling; they ascend the rivers to spawn; they breed; when they are a few pounds weight, they are found going down again as kelts, and there are a great number of them where there are very few salmon.

Can you specify any rivers in particular, in which, to your own knowledge, there exist a large number of what you term grilse, and in which there exist a small number of salmon?—There is lough Foyle and the rivers connected with it in Ireland, where there are great quantities of grilse or graylings, or grawls, as they are sometimes called, and there are very few salmon in proportion; it is the only place I know, although there may be others.

In what part of the country do grilse go by the name of graylings or grawls?—In Ireland, at the Foyle.

Of what size are they in the Foyle?—They will weigh from 2lb. to 8lb. or 9lb. according to the time of the season.

Are you acquainted with any rivers where salmon are found, and grilses are not found?—No.

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Are you acquainted with any experiments performed by marking the tails or fins of salmon trout or grilses, in order to discover, whether they afterwards returned in the shape of salmon?—I never marked any, but I heard such experiments had been made; I have seen it stated in the newspapers, but whether it was the fact or not, I do not know.

Have you had any personal knowledge of the Foyle?—Yes.

State at what period, and to what extent?—In the end of the month of May, and in June and July 1819, and also at the same period in 1820, to the best of my recollection, I was at the Foyle, and saw considerable quantities caught; indeed I brought 1,200 over with me to the Glasgow market; they were sold in Glasgow, Paisley and Edinburgh, and I have seen similar cargoes that come from the north of Ireland. There were two cargoes sent to me last year, which were forwarded to London.

Does it consist with your knowledge, that the fish in the Foyle are almost exclusively grilses?—Yes, the greatest part of them are grilses,

Do you state that the grilses go up loaded with spawn, and come down as kelts?—Yes.

You have observed the return of the grilses to the sea, after they have spawned?—Yes.

State what you consider to be the distinction between a grilse and a salmon?—The grilse is a much less fish in general; it is much smaller at the tail in proportion, and it has a much more swallow tail, much more forked; it is smaller at the head, sharper at the point of the nose, and generally the grilse is more bright in the scales than the salmon.

Do you consider what are commonly called sea trout, to be a distinct species from the salmon?—Yes.

State your reasons for that opinion?—Because, although in some friths and rivers, where there are a great many salmon there are also great numbers of trout; yet in others, where there are a great many salmon there are very few trout; in short, they are not always in numbers corresponding to the numbers of salmon; they also go up to spawn and return to the sea as kelts, if they are not prevented from doing it.

Is the sea trout different at all from the salmon, in point of form?—Not much from the salmon in point of form.

Is it different from the grilse?—It differs more from the grilse than the salmon, it is not so forked in the tail nor so small; it is more even and more round at the head, not so sharp as the grilse.

Can you state on your own knowledge, that the sea trout spawns?—Yes.

What opportunities of observation have you had as to that fact?—I have seen them ascending the rivers loaded with spawn, caught them, and I have also caught them coming down as kelts; therefore, though I did not see them spawn, I fully believe, as well as if I had seen them, that they do spawn.

Of what size have you seen the sea trout ascending full of spawn?—Two pound weight generally, more and less; I consider they would average 2 lbs. or thereabouts.

Have you ever observed the young sea trout descending the river?—I could not distinguish them from the fry of salmon or grilse when they are very small; I consider they all descend together.

You have in reference both to the salmon, the grilse, and the sea trout, made use of the term kelt, the Committee wish you to state, whether this is a term that you apply indiscriminately to these three species of fish, after they have spawned?—Yes, it is after they have spawned; some apply the term foul fish.

Do you wish it to be understood, a kelt and foul fish are one and the same thing?—Yes, certainly, they are both foul; but foul fish applies generally to a fish out of season, whether before or after spawning. Kelt signifies a foul fish recently spawned.

You mean to say that all kelts are foul fish?—Yes.

You have stated to the Committee, that you are acquainted with many fisheries in the sea, on the north-east coast of Scotland, be so good as to state, whether the fisheries have been recently established on those stations?—Some of them have been very recently, others not. I have been acquainted with some of them since 1813, and with some of them only since 1821; at Buryhead in particular, there never was any salmon caught before 1821.

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What are the modes of fishing which have been or are now in use in the various rivers, estuaries and sea coasts, with which you are acquainted?—In rivers they are by boat and net and floating nets, of various descriptions, used with machinery or not; they are also by cruives or cuts, as they are called in Ireland, which is the same thing; they are also by spears and such weapons, and by the rod in the rivers; and in the estuaries and sea they are by raise nets and stake nets, of different descriptions; net and coble and floating nets of different descriptions, by halves, by poke net and hang net. These are all I recollect at present.

Be so good as to state what the mode of fishing is which you term by halves?—There is a pole or spar of wood 14 or 16 feet in length, and to that there are three sticks, what they call end and middle sticks; two end sticks and a middle stick; to these sticks there is attached a poke net. The man goes down to the frith or river with this upon his shoulder, and goes into the water with the net, and stands till the fish come into the part. He then lifts it up and kills the fish. When he has done fishing he carries the net ashore again.

Is that mode of fishing one by which any considerable quantity of fish is caught?—Yes, considerable quantities are caught sometimes.

In what stations is such mode of fishing resorted to?—When I was much about the Solway, it was resorted to upon the Earl of Hopetoun's fishings, and Mr. Nelson's upon the fishings of the town of Annan, the Earl of Mansfield's, and several others, which I do not recollect at present.

Are these fishings upon the Solway?—Yes; I omitted to state that there are also stage nets used in some places.

Be so good as describe the process of fishing with stage nets; the practice and mode of fishing?—There is a long line of stakes, and of rice or wicker work run from the shore, from high water, near to low water mark generally. Then there are several couples from 14 to 16 feet asunder, which form an obtuse angle, with the leader from the shore. Betwixt these couples there is a poke net placed, which goes upon sliders. There is a platform or stage placed upon the top of these couples, so that a man may stand upon the top of them, and see or feel when the fish come in, and haul them up to the top of the stage, and kill them. There is a gangway betwixt this stage and the shore for the fishermen going and reutrning from the shore. There is sometimes a leader attached to the sea-end of the couples for the purpose of conducting the fish into the pokes.

In what stations is the stage net mode of fishing practised?—I believe it is only practised now at Alloa, in the river Forth They were in use upon the Tay, many years, but there are none on the Tay now.

Is it a powerful mode of fishing?—Not very powerful, I believe.

You have enumerated the various modes of fishing with which you are acquainted, do you consider that all such modes of fishing are authorized by law, or are any of them deemed to be illegal?—I consider that the net and coble, and the cruives in rivers are authorized by law; also floating nets of different descriptions in the rivers, and the coble nets and different kinds of floating nets are legal in the friths. The stake nets and stage nets are said to be contrary to law, in friths. The stake nets have been found to be so by a decision in the supreme court of Scotland.

Are stake nets authorized in the Solway frith and its tributary streams, by a special statute?—Yes, I believe they are.

Do you consider that any of the modes of fishing which you have enumerated tend to the undue destruction of salmon or of the salmon spawn or fry?—I consider the net and coble in the rivers tend to the undue destruction of the salmon, and the salmon spawn and the fry.

State your reasons why?—Because they destroy a great deal of the breeding fish when they are near the spawning; they destroy a great deal of the kelts also after spawning; they also destroy the beds where the spawn is deposited, by tearing up the gravel; and they also destroy the young fry by beginning too early to fish when the nets are not of a proper width.

You say, that net and coble fishing is destructive to the fry when the meshes are not of a proper size?—Yes.

What is the usual size of meshes of nets?—Some of them about an inch from knot to knot in the bags or middle of the net.

Is that the usual size?—Yes, in the middle of the net in the rivers.

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Will the salmon fry not pass through nets of an inch from knot to knot in the mesh?—Not if there is much weed or dirt in it; and sometimes particularly when there is a number of them, they get broadside on, in particular when there is salmon in the net, they prevent the fry from going through so easily; and the net is loose and not extended, more especially when near the edge of the water.

Have you seen fry destroyed in that manner by fishing by net and coble?—I have.

Where?—In the river Annan.

In considerable quantities?—Not in great quanties at a time.

Was it high up the river?—Near to the town of Annan, and from that to above Mount Annan.

Is Mount Annan above or below Annan?—It is above the town of Annan,

What is the depth of the river there?—It is of various depths, some of it a foot, some of it 12 feet, and some of it more.

In the places where the nets are drawn by net and coble fishing for salmon, what is the usual depths?—It is of various depths, every place differs in depth.

Is it not in deep water that the salmon usually lie?—Very often they do; they are found also in the shallow water. When they are ascending or descending you may spear them there very easily.

I am speaking of net and coble fishing?—I mean net and coble fishing.

You have also said, that the net and coble fishing is destructive to the beds of fry, before the young fish begin to move?—Yes, I consider they are.

Have you seen them so destroyed?—I never saw them, but I believe it as well.

Is it not in the shallow parts of the river that the eggs of the salmon are deposited?—Generally.

Is it usual to fish in those places with net and coble?—Yes, it is; they come over them, and go down into the pools, if there are any; it is often at the top and bottom of the shallows that the spawn is deposited; I have seen the net obliged to be lifted up in order to clear it from the gravel.

But you never saw any of the beds of spawn destroyed by nets?—I never saw the spawn coming up, but I have been told it by people who have seen the eggs floating upon the water, and I believe it.

With regard to the destruction of kelts by net and coble fishing; is net and coble fishing of that peculiar description, that it is more apt to catch kelts than any other kind of salmon?—Yes, when there are a greater proportion of kelts there than other kinds of salmon.

Do the cruives intercept the kelts from coming down to the sea?—They do so when there is not plenty of water to go over, and no opening in the cruive dyke.

Do you mean to say, that they are intercepted by the dyke that runs across, or that they are caught in the boxes?—They are not caught, they are intercepted, prevented from going down.

I wish to know the state of the fish with respect to spawn and melt in the months of July and August?—They are generally much fuller then of roe and melt than what they are now; but some of them may be found in the same state, or nearly so, as what some of them are in May.

Do you consider that the great proportion of fish caught in the month of August are full of roe and melt?—Yes, the great proportion of them are getting full of roe and melt; they always get full as they get near spawning.

Is this in one river, or generally in the rivers that you know?—In all the rivers that I am acquainted with.

You have stated what comes within your knowledge, respecting the undue destruction of salmon and salmon fry by net and coble fishing; be so good as to state your opinion respecting the other modes of fishing in the same respect?—The other modes of fishing are not nearly so destructive; the stake nets seldom catch any of them; they are seeking their way to the sea, and they go down through the deep water generally; there are very few that are ever caught in the stake nets.

Are salmon fry destroyed to a great extent at the mill dams and mill sluices?—Yes, to a great extent; I have seen hundreds of them lying dead at the bottom of a mill race, killed by the wheel; and I have been told, by people who had

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seen them, that there were cart loads and baskets full taken up from the mill-dams and mill races into the mills on the tributary streams of large rivers, and that people actually fed their pigs with them; I have heard that said and believed ever since I was a boy; I did not actually see them myself applied to such a use, but I have been told it, and I believe it to be the case. I have seen them in thousands and tens of thousands, in the water in the mill-leads, seeking to go down, but prevented by the dyke across the river, which they could not get over.

Do you consider that the destruction of salmon fry to which you have alluded, might be greatly obviated by a proper regulation of the fishing season?—Yes, very much. If they were not to begin to fish so early the fry would be got into life and strong; and by regulating the width of the nets the greater part of them would pass through; if attention was paid to them, fewer would be drawn ashore; if care was taken, the greater part could be put back alive into the water, if not injured.

Could any regulations be adopted with respect to mill races, which would have the effect of preventing the destruction of salmon fry?—Yes.

What regulations?—By making a proper sluice in the dam dyke nearest to the mill race, and by putting in a hack; such a hack is sometimes made of splits of wood and sometimes of iron; it should be made so close together in the spars that it would not let the fry pass through it.

Is it your opinion that such a contrivance might be applied to the mill races without injury to the mill?—Yes, to all that I have seen.

Are you aware, that by the Act of the Scotch Parliament, 1696, it is required that there shall be a constant slop or break in all dam dykes?—Yes, I have been informed that such is the case, but I believe it is not attended to.

Is the mode which you have described, in your opinion the most effectual that could be resorted to for the purpose of the protection of the fry? I think so.

Is there any particular description of bird that feeds on the spawn after it is deposited?—I have heard so, but I never saw them.

Are you not aware that in some rivers a premium has been offered for the destruction of birds of that description?—I am not aware of that.

Are there any and what improvements in the mode of fishing, which in your opinion might be adopted and established?—Yes, there are very great improvements that might be adopted.

Be so good as to state what occurs to you on this subject.—Floating nets, of certain descriptions and on certain stations, and stake nets in other stations, would be a very great improvement; but, as the law now stands, we are prohibited from doing it in consequence of the decision of the courts in Scotland. After the stake nets were put down we tried floating nets of different descriptions, and we no sooner had them in the water than we were interdicted; at last we did not know what kind of net to use. The coble nets are of various descriptions, both in regard to their size and form, but we could not venture to make any improvement; we were not even allowed to put a heap of stones together to draw our nets upon, although the river proprietors erect as many on the banks of the river, and even in the channel, as they please; besides erecting various kinds of machinery to assist them in working their large nets, overlapping each other across the whole river; I speak with reference to the Tay.

You state, that the decision of the courts in Scotland have prevented the establishment of various modes of fishing which you would have been disposed to resort to; are there any similar causes to prevent your doing so in Ireland, where you have stated that you also have experience?—I am not aware of any; I have not heard of any.

From your knowledge of the law which relates to the Solway, do you not hold that that frith is an exception?—The Solway is always excepted.

Has the quantity of salmon bred in the rivers been found to increase, in consequence of these inconvenient restrictions upon the mode of catching them imposed by the Scotch courts?—No, I do not think they have increased.

By what modes of fishing can the greatest quantity of salmon fit for market be with permanency supplied?—By the stake net mode of fishing in most situations in estuaries and the sea; but by the net and coble, and floating nets of different descriptions in others; and by the net and coble of different forms, and by cruives, in rivers.

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Do you mean floating nets in rivers?—Yes.

You consider always that the most advantageous regulations as to close time must be adopted for the benefit of all modes of fishing?—Yes.

Would not a net kept constantly stretched quite across the river, at the narrowest part, be the most effectual mode of catching fish?—It would catch very few; it might stop them, but it would not catch them.

It would enable you to catch more fish below?—Yes, if you stopped the fish.

If all the fish were stopped at a particular part of the river, so as to prevent them going up, it would catch more below?—That is not catching, that is stopping.

Do you mean to say, that the more modes that are employed for catching fish, the more fish will be caught?—Certainly, the more nets, the more fish always.

When were stake nets first introduced?—As far as I have been informed, above 100 years ago; I have known them very nearly 30 years myself.

State the progress of the use of stake nets?—As far as I know, they were first used on the Solway; they were then termed raise or rise nets; it was a part of a circle, nearly a crescent; the net was tied to the top of the stakes, and rose with the flowing tide, and only caught fish at the going down of the tide; then it was improved upon, and the nets were so constructed as to take fish going up the flood tide, and also to take them going down with the ebb tide; and improvements have still been made upon them.

State the progress of their introduction from the Solway to the Tay, and afterwards on the north-east coast of Scotland?—It was in 1797 or 1798 that they were introduced into the frith of Tay, and I think a few years after that they were introduced in the north of Scotland.

When the stake nets were first introduced on the Tay, what was the result?—The result was, that nearly double the quantity of salmon was caught.

You state that there was a great increase of the salmon taken in the river and frith?—Yes, taking the Tay altogether.

State as far as you can, the produce of the several stake net fisheries on the Tay?—I cannot state the produce without referring to the printed state of the Tay process, and subsequently to my own books and papers, for the properties I was connected with since that period, which was up to 1812; but I have most of these books in town, and could furnish a statement; I can state from memory, there was nearly double the quantity taken on the Tay to what was previous to the stake nets.

Are there no stake nets on the Tay now?—None.

When were they removed?—One was removed in 1804 or 1805; some of the others were removed in the beginning of 1813, in March; and I think the whole of them were removed in 1817; but I cannot at present state the year with certainty; it is merely from memory.

What has been the result of the fishing upon the Tay since the removal of the stake nets, as to its produce?—There has been a want of an immense quantity of salmon; nearly the one half of what was caught before.

Does the observation of the witness apply to the produce of the river generally?—It applies generally to all the Tay, taking the frith and the river.

Do you mean to say there is no part of the fishing of the Tay where the quantity of fish has increased since?—I do not mean to say that, because one station may increase and another decrease by the mode and particular way in which it is fished; I say, take it generally, there is not one half of the quantity shipped that there was.

Does the witness mean to state, that the total quantity of fish caught in the Tay has decreased one half since the removal of the stake nets?—Yes, that is my opinion.

What are the modes of fishing now in use at the stations on the Tay, where the stake nets were formerly in use?—Some of the properties that produced 2 or 3,000 salmon, and even above 4,000 a year, are now not fished at all; others are fished by floating nets of different descriptions, which we generally term net and coble.

Can you state the produce now at those stations where the stake nets were formerly placed?—I can state the produce of all those with which I am connected.

State the produce as far as you can?—It must be from my books; I have not the

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the memorandums upon me; I will prepare a statement from my books, and deliver it in to the Committee.

Is the Committee to understand, then, that the stations which were formerly very productive, are now comparatively unproductive?—Yes; some of them worth nothing at all.

Do you consider that this result is occasioned by the state of the law putting an end to stake nets in those stations?—Yes, and from preventing us from using a certain description of floating nets, and preventing us from using the stage nets, which were used for centuries, from time immemorial; and which only gave way in consequence of the stake nets being established.

For what reason do you not return to those modes of fishing which were legal before the stake nets existed?—Because we are not allowed; we are told that the decisions of the courts are against them; and we are threatened, if we put them up, that they will be immediately suppressed.

By whom?—The heritors of the river Tay and their tenants; their general agent is the man who persecutes us.

Then you have abstained from making use of nets which were in use previously to stake nets, and as to which you are not aware that there has been any decision of a court of law?—Yes; they say there are decisions, but I am not aware of any; one of our proprietors threatened to put them up, and run all hazards; he said he was determined to resort to the old mode; but he is now dead.

If the old mode of fishing by stage nets and floating nets were again resorted to, should you consider that the produce of the Tay might be considerably increased above its present produce?—Yes, I do; considerably.

Should you consider that it might be increased to the extent which existed during the stake nets?—No.

Are there any modes of fishing besides the stage and floating and stake nets to which you would be disposed to resort, if permitted by the law, upon the Tay?—No.

Were the stake nets in the Tay peculiarly destructive of the parent fish, after spawning?—No, they were not; very few were ever caught in them.

Is the Committee to understand, that the stake nets on the Tay were, in your opinion, less destructive of such fish than the coble nets in the rivers?—Much less.

Can you give any reason to the Committee, for the stake nets being less destructive of the kelts, than the coble nets in the rivers?—Yes.

State the reason?—The kelts in the river are in a much narrower compass, and so are more subject to capture; they are seeking their way down to the sea, and generally prefer deep water; the water on the banks on which the stake nets stood was very shallow, and generally by the time the fish came down so far from the river, the banks were getting dry by the tide leaving them; when the fish meet the flowing tide they generally stop, the current being strong; the surf or agitation of the water, in the shallow waters on the banks of the friths must also keep a weak, unhealthy fish, like a kelt, from venturing on the banks when it has not strength like a sound fish; the deep water is more suitable; I have often found them driven on shore dead when they ventured on the banks; they were thus very seldom caught in the stake nets, because they were seldom within reach, whereas in the river they had no means of escape.

Were many of the fry of salmon ever caught in the stake nets in the Tay?—I never saw any; none to my knowledge.

You have already stated, that the salmon fry in coming down the river, after they got into the tideway, remained in deep water; is that the case or no?—Generally it is.

What were the effects of the stake nets on the Tay, with reference to the spawn?—They had no bad effect at all; there were no spawn where the stake nets were placed; they were besides stationary, and could not disturb the spawn.

Do you state that the spawn never came in contact with the stake nets?—Yes; never to my knowledge.

Do you mean the Committee to understand from that opinion, that the spawn is always higher up the river than where the stake nets are placed?—Yes.

You state that you have never yourself seen the fry taken by the stake nets?—Never in the Tay.

Does it ever occur, that the mud and sea weed get into the stake nets, and so present

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present obstacles to the free passage of the fry?—Sea weed and such matter get upon them, but not to the extent to prevent the fry going through the meshes, even if they did come in contact with them; in the early part of the season when the fry is going down there is little sea weed; the sea weed becomes troublesome only in the summer months.

During the existence of stake nets, was any care employed to prevent these accumulations?—Yes, great care; otherwise, from the force of the water, the nets would have been forced down or undermined; they required to be cleaned generally every tide, towards the end of the season.

Otherwise, from the force of the water bearing against the nets, they would in all likelihood be overset?—Yes; the ground would run away from below them, where they were on sandy ground.

With the stake nets, did you catch a greater number of fish by the flowing or the ebbing tide?—In some situations we caught most by the flowing tide, and in others we caught most by the ebbing tide.

What was the size of the meshes of the stake nets?—From 8 to 12 inches in circuit at the Tay, and the north of Scotland.

What was the distance from knot to knot?—From two to three inches upon those of the Tay and north of Scotland; but in the Solway they were nearer.

What is the size of them in the Solway?—The narrowest meshed stake nets are an inch and three quarters from knot to knot; at least that was the size when I was at the Solway; in the rivers they are less; I do not recollect the size without referring to the Act of Parliament.

Does the small size of the meshes of the stake nets on the Solway, produce any effect more injurious to that fishery than on the Tay and other rivers?—No, I do not think it, if the nets are kept clean; but formerly there was a great deal of wicker work at the bottom of the stake nets in the Solway, which is now confined to be only a certain height; therefore, any small fish has now a better means of escape than formerly; besides there are now openings covered with netting in the wicker work.

You state that sometimes a great quantity of fish were caught by the stake nets on the ebbing tide; were those fish going further up the river?—They were going down the frith.

Supposing they had not been caught, would they have gone up the river the next tide?—I do not think all would.

You mean to state they were fish in their progress to the sea?—Yes, decidedly; and might have been caught and destroyed by grampuses and seals.

Do you mean they were fish that had been in the fresh water, and had come out of the fresh water going back to the sea?—Some of them might have been, others not; the fish seldom go against the tide.

Is it the fact or not, that a quantity of fish in good condition, come out of the fresh water into the sea?—It is those that have recently entered and go back, they must be in good condition.

In reference to your statement as to the meshes of the stake nets, do you mean the Committee to understand, that they never were, in point of fact, closed by sea weed?—Never all of them.

Pains were always taken every tide to clean the nets?—Always; or else the fishermen did not do their duty.

Is it ever their interest not to do their duty?—No, quite the opposite; they would get a great deal of hard work.

Had they any chance of catching a greater number of fish by not clearing the nets?—They had not such a great chance.

For what reason?—Because the nets would tumble down, or openings would be made below, and the fish would go through these openings.

In point of fact, did you ever see any of the salmon fry in any of the stake nets on the Tay?—Never.

Had you an experience so extensive, that if they were in use to be caught by the stake nets, you think you must have seen them?—I think I must have seen them, for I attended all the seasons at the nets which we possessed.

Have you, in point of fact, seen any other kinds of fish than the salmon, taken in the stake nets on the Tay?—I have seen a few, such as skate, cod, sturgeon, spirlings, sprats or garvies, and flounders.

Do you infer from that fact, that you must have seen the salmon fry, if they ever

ever had been caught in the stake nets?—Yes, I am sure I must have seen them.

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(May 24.)

Has the same observation which you have made, with regard to stake nets on the Tay, been found to be true, with regard to stake nets on the Solway?—I believe it will generally apply now; but formerly when there were two or three feet of wicker work at the bottom of the Solway nets, I have seen a few of the salmon fry, but not many, and those were at the stake nets, placed very near the foot of the Annan river.

Is it consistent with your knowledge, that the present stake nets upon the Solway, catch the salmon fry?—No, I do not think that they will, if the nets are properly cleaned.

Having stated, that you have seen certain fish other than salmon, in the stake nets, I wish you to state whether you have also seen the same small fish left in pools and rocks, and on the banks of the Tay, where there were no stake nets?—Often; I have seen small fish, such as garvies and spirlings, and other small fish in the pools, on the banks and among the rocks, where there were no stake nets.

What were the effects of the stake nets in the Tay, with reference to the fisheries in the upper parts of the river?—I believe that they did not much diminish the produce. They might catch a few fish that would have ascended the river; but they caught a great many that would not, and never would.

Then you mean to state to the Committee, that in your opinion, there was not a diminution in the produce of the upper fisheries, corresponding to the increase in the lower?—There was not a diminution corresponding to the increase in the lower.

You have said, they catch a great many fish that never would ascend; how could you know those that would from those that would not?—I know from the number of grampuses and seals that frequent the Tay. I have seen a great many fish caught by them; they guard and watch the fish. It is impossible that all these fish could return, the grampuses and seals catching so many. There was very little chance, indeed, of all coming back again.

You stated, some time ago, that fish in a good condition, were found on their way back to the sea; fish that would not have gone up the river; is it the nature of the fish to return in a state of good condition to the sea?—Yes.

Do you mean to say, that these fish taken by the ebb nets, had been far up the river, or merely at the mouth of it?—The most of them had been at the mouth of it, in or near the frith.

But you think the greater proportion had never been positively in the river, beyond the tideway?—Yes, the greater number had not been beyond the tideway.

Do not you think that all salmon are naturally inclined to advance up the rivers as far as they are permitted?—Not at all seasons of the year, only when they are going up to spawn; but they run backwards and forwards with the tide, in all directions.

And they often dwell in the estuaries without ascending the rivers?—Yes, a great number of them.

Can you state to the Committee what was the total produce of the upper fisheries in the Tay, and also the lower fisheries, before the introduction of stake nets, and the produce of the same fisheries when they were in use?—The upper fisheries generally produced, I think, about 30,000 salmon annually, on an average; I cannot speak to the exact number each year. Previous to the introduction of stake nets, the lower fisheries only produced a few thousands, as far as I have seen the accounts; and while the stake nets were in existence the river and frith together, produced between 50 and 60,000, besides grilses. You will understand me as speaking of salmon besides grilses. I have seen these accounts in the printed state of the Tay process.

In the quantity which you state, between 50 and 60,000 caught in the river and frith together, what proportion applies to the upper, and what to the lower fisheries?—I think, betwixt 20 and 30,000 would apply to the upper fisheries, and about 30,000 would apply to the lower fisheries.

Consequently the increase of the lower fisheries was much greater than the decrease of the upper?—Yes, much greater.

By lower fisheries, do you mean stake net fisheries?—I mean frith fisheries.

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In what way would you describe them, so as to distinguish the upper from the lower fisheries?—By upper, I mean the river fisheries, properly so called, where the tide is not always ebbing and flowing; by lower fishery, I mean the frith fishery where the tide is always ebbing and flowing.

In the Tay, where would you consider the upper fisheries to cease and the lower to begin?—I would consider the upper fishery to cease near Newburgh and the lower fishery to begin there and continue down to the mouth of the Tay.

What do you consider the external boundary of the Tay?—I consider the Gaa bank, upon the north, and the Abber-Tay bank, upon the south, to be the boundary of the frith.

Then in your calculation you include no fishing beyond Abber-Tay and the Gaa banks?—I do not include any beyond that.

What has been the consequence of the removal of the stake nets; what is the quantity that you now consider to be caught in the Tay, within the same boundaries of the Gaa bank and Abber-Tay bank?—I should consider, that the number is little above 34,000; but without referring to the different accounts I cannot say exactly.

Then does the witness mean to say, that about 30,000 salmon are caught on the river, properly so called, and about 4,000 on the lower fishings of the river; making in all 34,000?—That is my opinion; but documents could be had to show it exactly.

Then is the Committee to understand, that there has been a great diminution in the produce of the salmon fisheries in the Tay, taking it as a whole, in consequence of the stake nets being removed?—Yes.

Do you consider that it is possible to take a great number of salmon in the frith, without much diminution of the produce of the river fisheries?—I do.

In what manner do you account for this?—Because there are a great number of fish there that would not go up the river; some would go back to the sea, and others would be destroyed by grampuses and seals.

Has the price of salmon, the produce of the Tay, increased since the removal of the stake nets?—No, I do not think it has; in the time of war, the prices were higher, in proportion to the quantity, than they have been in the time of peace.

What is the principal market for the Tay salmon?—London; we sometimes send a few salmon to Edinburgh, Dundee, and so on.

Do you consider that there are a great number of salmon destroyed by grampuses, porpoises and seals?—A great number.

At what time of the year do the grampuses and porpoises appear in the Tay, and how long do they remain?—Sometimes they will appear as early as the month of April.

Do they come together, or separately?—They come together; grampuses and porpoises appear as early as the month of April, and continue till October; the seals are there all the year over.

Are they to be seen in pursuit of the salmon?—Yes.

State what may have come within your knowledge or observation on the subject?—I have often seen the grampuses and porpoises and seals chasing and catching the fish; I have seen them eating them, and I have found the remains of the salmon, the head and the bone and the tail of a number of salmon, after the tide had receded, which had been destroyed by the seals, lying upon the sand; they go into the stake nets, and kill the salmon there, and break the nets, and destroy great quantities of salmon; I have seen grampuses chasing the salmon on shore, and getting aground, and the salmon have been caught by the people on shore; I very nearly caught one myself the year before last, but it got into the water again; the grampus got aground, but it being soft mud, it also got into the water again; an old servant of mine is in the habit of catching the seals and boiling the oil, and he has found salmon in their bellies.

Do these animals go in shoals?—Generally in crowds; but when the salmon is scarce they separate, apparently for the purpose of finding them out; and whenever they discover them, they are all in pursuit, the same as a pack of hounds.

Do they go up and down with the tide?—They go in every direction, up and

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and down and against the strongest current, and across the tide; they go up and down, with and against the tide, many times in the day.

Have you ever known grampuses, porpoises or seals caught in stake nets?—Often; when I was at the Solway, we caught five large grampuses one tide in the stake nets; I have seen two or three in one tide at the Tay stake nets; seals also.

Are seals very numerous in the Tay?—They are very numerous.

Do you know that they are very destructive of the salmon?—I do; I am certain of that.

State what you have observed with regard to the destruction of salmon by these animals?—I have seen them chasing, catching and eating them.

Do you consider that the stake nets had any effect in regard to diminishing the number of porpoises and seals in the Tay?—Yes, I consider they had the effect of diminishing the number; there were not so many there then; they caught a number of them; they also caught the fish which the grampuses and seals were in pursuit of; they were obliged to go away out to sea to seek their food of white fish.

Do you think the number has increased since the stake nets were removed?—I am certain they have.

Have you ever counted the number of seals, porpoises or grampuses, on any of the particular banks?—I have often counted the number of seals that lie immediately before my house on a bank there; and there are a great many on other banks I have not counted.

State what you yourself know with regard to the number of seals or porpoises in the Tay?—I have often counted between 50 and 60 seals that lie a little from my house, summer and winter; and from the crowds I have seen on other banks, I think there were as many on other banks; the grampuses I have never counted, it would be impossible; they keep in deep water, and the one half may be under water when the other half is above; there are immense shoals; I have not the least doubt there are some hundreds.

Are the grampuses, porpoises and seals confined to any particular parts of the Tay, or to all parts?—They are generally in the estuary, where the Tay is ebbing and flowing, but sometimes they go as far as Lord Gray's; I have known one of them shot near Lord Gray's.

Can you give the Committee any idea of the number of salmon which may be destroyed on the Tay, by porpoises, grampuses and seals, in the course of a season?—I should consider there are a great deal more destroyed by them than is caught by man; I should think at least double the number.

Do you think that each porpoise, grampus and seal may destroy, on an average, two salmon per day?—I should think so, if they could get them; if they cannot get them, they must take less.

Does it consist with your knowledge, that there are grampuses and seals in the other friths and rivers on the sea coast, where there are salmon?—Yes; in all places I have been, where there are salmon, I have seen grampuses and seals.

Do you consider that they are destructive of salmon to the same degree almost wherever salmon exist?—Yes, we are very much annoyed with them in the Murray frith; I have seen seven or eight seals ranged in a line before a stake net, and when they discovered a salmon, they were immediately in pursuit; they break the nets, kill a number, and let away all the rest; they lie on the rocks in great crowds; the water is sometimes black with grampuses near the shore.

Do you think any of the salmon caught in the stake nets, would have gone to sea if they had not been taken?—Yes.

State your reasons?—My reasons are, I have seen such immense quantities swimming away from the rivers and friths; I have caught above 500 salmon and grilses in one stake net and at one time far from any river; I have caught nearly 200 far from a river, and I have often caught less quantities than 200 at a time, going away from the river; and I have seen great numbers that were not caught, swimming away from the rivers below low water mark, at low water, when the stake nets were dry.

Have you seen the salmon running down before porpoises and seals towards the sea?—Often.

Then

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Then is the Committee to understand, that there are salmon which frequent the friths and go out again to sea, without going up the river?—Yes.

Do you mean to state this opinion, with reference to the season of the year when salmon are not proceeding up the rivers to spawn?—Principally at that season; but at other times they will go back also, when the rivers are so small and so warm as not to be fit to receive them.

Do your statements, with regard to stake nets in the Tay, apply also, generally speaking, to the stake nets in other friths?—Yes.

Is it necessary for you to make any distinction between the stake nets on the Tay and in other stations, in order to state your opinion correctly?—I think, that in other stations there are full more fish caught in proportion, going away from the rivers.

Do you speak of friths or of sea coast fisheries?—Both friths and the sea coast. It is the Solway and Murray friths I particularly allude to. Upon the Tay and other places we had nets, which did not catch fish going up the frith at all. They caught them all going with the tide, and they were decidedly going to the sea.

Do you think that, by the use of stake nets in the friths, there is a great quantity of salmon caught, which otherwise would not be obtained?—Yes, I do.

What is the effect of the stake nets on the open sea coast, with reference to the fry?—They do not destroy the fry. They have no bad effect.

In point of fact, did you ever know any salmon fry to be destroyed by the stake nets on the open sea coast?—I never knew of any.

Do you consider that stake nets in the sea are injurious to the young of other fish?—No, I do not. I have seen a few of the young of other fish within the stake net at low water, but I have also seen the young of these fish in pools of the rocks and places where there were no stake nets.

What fish do you speak of?—Young cod and what they call *podlies*, the young of *coal-fish*, and young flounders and a few garvies or sprats.

What is the effect of the stake net fisheries in the sea, with reference to the salmon fisheries in the frith and rivers?—No doubt they may catch some that would go to the friths and rivers, but they catch a great many that would not go. The effect must be they must lessen the quantity, but in a small proportion.

Should you consider that the stake nets on the coast, near Montrose, could, in any perceptible degree, diminish the produce of the fisheries in the Tay?—No, I do not.

You do not consider that all the fish, which are caught by stake nets placed at the mouth of an estuary or river, are fish which would have gone into the river?—No.

Is it generally observed, that the fish caught by the stake nets on the coast are those chiefly which are going to the adjacent rivers?—It is considered that some are fish going to the adjacent rivers, but there are a great many going along the coast; a great many are fish which have passed the adjacent rivers.

Can you give any examples of this from your own experience?—Yes.

State them?—Upon the Solway we had several nets which did not catch with the flowing of the tide, but which caught large quantities going from the rivers; they had passed the river Annan several miles from it, many miles; and in Spey bay, on the Murray frith, we also caught great quantities that were not caught by the flowing of the tide, but with the ebb tide going away from the Spey, and further up the Murray frith, in Burghead bay; we have caught thousands going away from the nearest river, the Findhorn. In the Tay we have caught considerable quantities going away from the Tay and the other rivers connected with the Tay.

Were they always going with the tide, or were they at any time going against it?—Going with the tide. Those that were caught then were going with the tide.

Is there any particular season of the year which you are now speaking of, or is it generally?—It is all seasons when we are fishing, but generally in the summer months.

Do you mean that the fish caught at that time were clean fish?—Yes.

You

Mr. John Johnstone. (May 24.)

You are aware that stake nets exist in full exercise all throughout the Murray frith?—I am not aware of that.

Do you know that stake nets have been put down in any part of the Murray frith, by decisions of law?—I am aware there have been decisions of law. I am not aware they were taken down.

Do you know that stake nets do or do not exist in many parts?—I know they do in many parts.

Do not you know also the quantity of fish has very greatly diminished in all the rivers that run into the Murray frith?—I dare say that is the case. I am not certain with regard to the Spey, whether it has diminished or not.

Are you aware the Beauly or Ness has decreased?—I have heard the Ness has decreased.

You know stake nets exist at the mouth of the Ness?—I am not aware they exist at the mouth. I have not been there this or the last season.

And you know also that the fish have diminished although the stake nets exist?—Yes.

How do you account for that?—I account for it by the non-protection of the breeding fish, and also by the fry not being protected. I am aware that immense quantities of salmon fry going out of Loch Ness go into the canal, and they die in the stagnated waters; at least so I have seen it stated in the newspapers.

Are you acquainted with the Ness fishery?—Yes.

Do you consider that this canal is generally supposed to have been very destructive to the fishing of the river?—I should think it destructive in this way; that the fry entered it, and being confined in stagnated water they must die, and it is injurious in that respect.

You have stated that stake nets have been removed in the Murray frith; do you know what proportion have been removed, and what continue?—I should think that about one-fourth of the whole have been removed; those I allude to were in the Dornock frith, a branch of the Murray frith.

Are you aware of the reasons why the stake nets have been removed from portions of the Murray frith?—I was informed that there was a decision of the court of Session against them; but I also know, that a proprietor sent and cut a number of them down, destroyed them by their own hands, and the tenant of them became a bankrupt; he was not able to contend against the river proprietors and therefore they have been laid aside; the proprietors did not think proper to defend their property.

What river proprietor?—Mr. Mackenzie, proprietor of the river and Loch Shin.

Can you state to the Committee the reason why stake nets are continued in any part of the Murray frith, the general impression being that they are illegal?—The reason is, that the river proprietors have not commenced legal proceedings against them.

Therefore they continue because the law has not been executed?—Yes.

Should you consider, that if the breeding fish in the rivers were adequately protected, and that the injury of the canal to the river Ness could be abated, that the fishery on the Ness might be as valuable as at any period, notwithstanding the stake nets?—Yes; I consider it would be as valuable, or more so, if there was proper protection given to the breeding fish up the rivers.

You know that stake nets do exist at the mouth of the river Ness?—I know they exist in the Murray frith; how far from the Ness, I cannot say.

Martis, 25° die Maij, 1824.

THOMAS FRANCIS KENNEDY, ESQUIRE,

IN THE CHAIR.

Mr. *John Johnstone*, again called in; and Examined.

Mr. John Johnstone. (May 25.)

WHAT do you consider to be the effects of stake nets with reference to the navigation of friths; are they injurious, or useful?—I consider them to be very useful.

Mr. John Johnstone.

(May 25.)

In what respects do you consider them to be useful?—Because they are set upon the shallow banks and rocks in the frith, and act as beacons to the vessels, to show them the deep water, so that vessels can find their way not only in the day but in the night, which they could not otherwise do; they can see them in the night at a distance, when they could not see an ordinary beacon or a buoy, and by the noise the water makes rushing through the nets they can observe their place before they come to them.

Have you ever known vessels to be injured by stake nets?—Never; I have known vessels frequently go through them, but I have never known vessels injured.

Is it your opinion that vessels more frequently run upon the banks in the Tay now, than during the time when stake nets were there placed?—Yes, it is; they are much more seen upon the banks now than formerly.

What opportunities have you of knowing?—I live close to the Tay, and there are a number of banks immediately opposite my house, and very frequently vessels get on these banks in coming and going up the Tay, which used not to be the case before.

Have you had occasion to hear observations made to this effect, by persons in general?—Yes, particularly by seafaring people.

Do you consider that there is any difference in the quality of the salmon taken at different parts of the same river, or in the estuaries or the sea?—Yes, I consider there is a considerable difference; the salmon caught in the sea and nearest to the sea, are generally the richest; the nearer the sea they are, they are always considered the better, fatter and firmer.

Do salmon cease to be in a good state after they have been some time in the fresh water?—They do; they lose their bright colour, and lose their firm state; the fish gets longer in proportion to its thickness and loses its weight; it is considerably lighter after it is some time in the fresh water.

Do you consider therefore, that, generally speaking, the fish are in the best state in the sea, or when near to the sea?—Yes, the nearer to the sea the better, generally speaking.

You consider that a fish caught in the fresh water, but recently coming from the sea, will, for the same reason, be a good fish?—Yes, recently; if he is not many days in the water, if he is caught immediately out of the sea, I do not see he can be any worse.

Do you consider therefore, that, speaking generally, salmon caught in the friths or on the sea coast are of better quality than those caught in what may be termed the upper fisheries or rivers?—Yes, more sound in health, of a better colour even.

Are there any circumstances connected with the modes of fishing, which affect the quality of the fish?—There are; I consider that the draught net injures them much more than a stake net; by hauling them over rocks or beaches or sand banks, a number of fish together in a draught net knock one another about and knock off the scales, and it must soften the fish very much; whereas in a stake net or cruive, where there is plenty of water, they can take them out one by one, or all at a time as they please, and convey them to the ice house.

Does the fishing by net and coble expose the fish to the sun in an injurious way?—Very much; the fish must lie for a considerable time till a boat or cart comes to convey them away, therefore it must injure the fish.

Is the Committee to understand that salmon are taken alive out of stake nets?—Yes, generally speaking; it is the fault of the fisherman if they are not.

This you consider an important point with reference to preserving the fine quality of the fish?—Yes.

Are they left on the sand, by the water retiring before they are taken out of the stake net?—Very seldom, but they are sometimes, if the fisherman does not go down in time and the nets get dry; but in some nets pools are made to keep them alive, in case the fisherman neglects to go down in time.

What is the practice of fishermen in respect to visiting their stake nets; how frequently do they see them?—They must always visit them when the tide has left them or is leaving them; but very often they visit them at all times of the tide for the purpose of mending them and taking out the fish.

How many times in the day, generally speaking, do fishermen visit the stake nets?—Generally twice a day, sometimes three or four times

Mr. John Johnstone.
(May 25.)

Be so good as to state whether, in your opinion, stake nets, if generally established, would furnish employment to a considerable number of persons along the coast?—Yes, to a great number of men, besides women and children; the men would be employed to erect the nets and to keep them in repair; the women and children would be employed in the weaving or working of the nets. There would also be a number of coopers employed making boxes and kits; there would be ropemakers making the cordage and twine, carpenters employed building and repairing boats, and so on; women would be employed washing the fish when they are kitted; carters would be employed to drive the ice when it could be had. I have paid above 7,000*l.* a year for rent and these purposes.

State the number of persons who were actually employed at one time at the stake net fishery on the Tay, with which you were connected?—To the best of my recollection, we had above 100 men employed in the fishings with which I was connected, at one time, on the Tay, besides other places, and we had from four to six coopers constantly; above 20 women and children, besides ropemakers, who were employed. There were above 100 fishermen.

What proportion did that number bear to the whole persons employed in the stake net fishery of the Tay?—It would not be half the number, to the best of my recollection; they would be double.

In what part of the work are women and children employed?—Weaving the nets, making the twine into nets; many thousand weights of it, many tons of it were used.

It is to be supposed, that the men cannot be employed in the fishery throughout the year, but only during the fishing season; have they any other employment during the close time connected with the fisheries?—Some of them have; but the greater part are tradespeople and labourers, who find other employment; principally weavers.

Is the Committee to understand, that a greater number of persons would be employed if stake nets were used, than could be employed by fisheries conducted only by coble nets?—Yes, a much greater number.

Do the stake net fishers become expert seamen?—They do; they become very much qualified to manage boats and small vessels along the coast, and many arrive to be captains of smacks and coasters.

Do you mean, that coble net fishers cannot be equally useful in that respect?—Yes, that is my meaning; in the coble net fishery they use small flat-bottomed boats; they do not go far from the shore; and those in the river can merely work the coble; whereas the stake net people have sloops and boats of different descriptions under sail far from the land, and are out all weathers; they must of necessity, for their own safety, learn to be expert.

You mean the Committee therefore to understand, that stake net fishers become peculiarly qualified for the management of boats and small vessels on the friths and sea coasts?—Yes.

You have spoken of the produce of the fisheries on the Tay having diminished very much, in consequence of the most efficient modes of fishing not being allowed; does it consist with your knowledge, that there are not now as many fish caught in the Tay as there were formerly?—Yes; not near the quantity.

Has the salmon fishery decreased generally in the rivers and friths with which you are acquainted?—Yes, I believe it has decreased generally; but they have increased upon some stations.

In what situation has such increase taken place?—In the stations at Burghead, and upon the station of the Misses Stewart of Tanachie, and upon the property of Sir James Gordon, Mr. Arkley and others.

To what cause is such partial increase to be attributed, while a general decrease has taken place?—Because these stations were not occupied formerly to the same extent they are occupied now.

What modes of fishing are practised in those stations which are now recently occupied?—A stake net.

Since what time has the decrease on the Tay been perceptible?—It has been quite perceptible since 1812, to my knowledge; the stake nets were stopped in the beginning of 1813; they were not all stopped then; those with which I am acquainted, were put down in 1813, after they were erected, the beginning of 1813.

Can

Mr. John Johnstone. (May 25.)

Can you give the Committee any information as to the extent of the decrease in the Tay?—Betwixt 20 and 30,000 salmon.

Can you state the time or the extent of the decrease in any other rivers or friths?—No, I cannot.

Is the decrease in the produce of the Tay general throughout the river or frith, or only in particular parts?—I believe it is general, but it is particularly in those parts where the stake nets were.

Does not the produce of the rivers fluctuate considerably according to the season, and from accidental causes?—They fluctuate very much, owing to different seasons.

When you say, that the fisheries in the Tay and in other rivers and friths has fallen off, do you speak of a general falling off, or do you mean an occasional decrease or fluctuation?—I mean a general falling off.

To what causes do you ascribe the general falling off in the Tay?—I ascribe it to the nonprotection of the breeding fish, to beginning too early to fish, to poaching, fishing in close time, to the destruction of the breeding fish, and to the destruction of the spawn and fry, and to the want of efficient modes of fishing in some particular parts; there are some of the fishings not fished at all.

Are there in any of the rivers that fall into the Tay, cruives where the fishery is not stopped at the proper season?—I am informed there is one in the river Earne.

To whom does it belong?—To the Earl of Kinnoul.

What is the practice of the fishers of that river?—It is said that they fish several days in the week, during the whole year, even in close time.

Have you any distinct or positive information as to this?—It has been told to me, and that they also fish with boat and net in close time; that the boat and net was seized by a tenant of part of the Tay, and he was prosecuted for so doing.

Do you understand that the practice continues, that it has not been abated?—It was last year that this happened, as I was told, last October.

Do you know of any similar practice prevailing in Loch Tay?—I am also informed, the Earl of Breadalbane claims a right to fish all the year over in Loch Tay, and that it is a great cloak for poachers who fish in close time; that the fish is sent down to Perth, and sold to different people, as far as my information goes, and fish are shipped to London before the 10th December; I have seen them myself frequently shipped; and they pretend they come from Loch Tay, but I have been told they do not come from Loch Tay.

Do you apprehend, that the protection of Loch Tay is a very important point for the prosperity of the fishery in the Tay in general?—Yes, I consider it to be a material point for the protection of it, and the streams that run into it.

Do you consider, that it is one of the most important breeding grounds for the supply of fish?—Yes, I consider the loch is a security for them at large; they can ascend the small streams and breed, and retire to the loch.

Do the fish spawn in the loch, or only in the rivers that run into it?—I consider they spawn in the rivers principally, but they may spawn in the loch also; I rather think they do; they go up as far as they can, and spawn.

Do you consider that there is a destruction of spawn and of fry by the fishery commencing at too early a period?—Yes, I consider there is a destruction both of the spawn and of the fry.

Are the coble nets injurious to the spawn and young fry, by being dragged over the places where the spawn is deposited?—Yes, I consider that they are.

Have you ever heard that the roe of the salmon is used for bait in the catching of other fish?—Yes, I have often heard so; and I have seen it stated in the newspapers that it was very much sought after, and that it was sold at a very high price for the purpose of baiting; and I have been told so by people who salted it, and kept it for that purpose.

Do you consider it is possible to follow such a practice, without great injury to the salmon fishery?—It is possible, if the roe is procured before the fishing season terminates; but if it is procured in the close time it is very injurious, and the possibility of selling the roe at a high price, is a great temptation to poachers to sell spawning fish after close time.

You have stated that the fish are fatter and firmer when taken in the stake nets

nets in friths, than when taken in rivers; how long do you suppose a fish may exist in fresh water, without being deteriorated in its condition?—It would not remain long; a few weeks would make him a great deal worse; it depends upon the state of the river.

Mr. John Johnstone.

(May 25.)

As people are always fishing in the river during the season, and the probability is, that many fish are caught before they have been three weeks in the river, you admit, that in that case, the condition may be as good nearly as those that are caught in the stake net?—At the bottom of the river; if they are taken either immediately at the sea or frith, I admit they are as good if taken immediately, but it depends on what part of the river you apply to; if they go up 30 or 60 miles, and if the water was very warm, the fish would soon fall off, and in many cases they do.

Supposing the rivers large enough to admit of their swimming without interruption, at what rate do you suppose that the fish generally travel in ascending the rivers?—It depends entirely on the nature of the river, and whether or not the fish are disturbed; a fish will stop in a pool many days without leaving it; if the weather is warm he will stop in the pool a long time, and not attempt the shallow water; but if his instinct inclines him to go up to any spot, he will go quickly.

Do they run faster in autumn when they are going up to spawn, than in the summer months?—Apparently they do.

Much depends upon the rapidity and other circumstances in the river, as to the celerity of the movement of the salmon?—Yes; much depends on the state of the river.

How long do you suppose they may remain occasionally in a place without going further?—As long as the river remains in that state; if there is a ford above or below that he cannot get over, there he must remain till some more water come.

How long do you suppose the sea louse remains upon fish, after they leave the salt water?—I do not think it remains many days; for when they are in the fresh water, we soon observe them to go off; they do not go off all at once, they go off by degrees.

Are the breeding times the same in all places, or nearly so, as far as your knowledge goes?—The breeding season is nearly the same in all places with which I am acquainted; but the fence months are not the same, nor nearly so.

Is it your opinion, that the fence months should be the same all over the kingdom?—I think they should be the same; I am aware that some rivers may have fish a little longer in a sounder state than others, but I think all should be the same; under the present regulations, some give over on the 26th August, some on the 1st September, some the 10th September, some the 25th, and some fish as long as the 10th October.

Is salmon saleable all the year round?—Some of them are; indeed they all find a market, but I consider they are very unwholesome food; you may get people to buy any thing, if you sell it cheap enough.

Will you state then, what are the different times of beginning and ceasing to fish in the rivers with which you are acquainted?—In the river Bann in Ireland, they give over on the 12th August; in Lough Foyle and rivers connected with it, they give over on the 1st of September; and upon the Solway they begin in the river Eden on the 1st January; on the Dee, it is on the 2d February; on the Nith and Annan and Esk, on the 10th March; and all of those Solway rivers close on the 25th of September. Then in the Tay they begin on the 10th December, and close on the 26th August; at Montrose, I believe, it is February, and they fish till the 10th October. I do not know exactly when they begin at Aberdeen, but they close on the 19th September; at the Deveron, they begin on the 30th November, and close the 10th October; at the Spey, they begin on the 30th November, so at least I am informed, and close on the 26th August in the river, but they fish in the sea at the mouth of the Spey, much longer; I believe it to be the same in the rivers farther north, but I do not know with certainty. The Tweed begins on the 10th January, and continues till the 10th October.

Cannot salmon be preserved for several weeks in ice so as to be sold as fresh?—No, I do not think it can for several weeks, it gets into a bad and soft state; I have never done it myself; I should prefer not to keep it one week; it depends on people's tastes.

Mr. John Johnstone.

(May 25.)

Is it your opinion distinctly, that it cannot be kept for two or three weeks and sold as fresh fish?—Yes, it can be; but the fish will be soft and of inferior quality.

Then, unless there is some prohibition as to the sale, what security can you have, that fish caught in the fence time will not be sold at the expiration of the fence time, when probably the price will be uncommonly high?—It might be sold; purchasers might take it and keep it in ice, and afterwards sell it when the fishing season begins, after the fence time has expired. I have seen salmon brought from the higher parts of the Tay and shipped at Dundee for the London market, before the 10th of December.

Do you not think then, that it would be necessary to have the sale prohibited for certain months, as well as the fishing?—Certainly, most undoubtedly.

Do you believe the fish always go up the river with the tide?—Not always.

Do you believe they ever run against the tide?—Yes; they often run against the tide.

How far up the river have you ever seen the sea louse on the fish?—I have seen the sea louse on them 10 or 12 miles up the river.

Never beyond that?—I do not know; I am sure I have seen them at that distance; I will not say I never saw it, but I do not recollect an instance.

Have you much knowledge of fishing high up the river?—Not high up the river Tay.

What distance from the entrance?—In some rivers I have knowledge a considerable way up.

State the distance?—I cannot say the exact miles.

Mention the place?—I have knowledge of the Tay up to Perth, and above it. I have knowledge of the Annan up to Moffat.

Have you ever seen any sea lice on the fish taken there?—Not that I recollect so high up; it is in the mouths of rivers chiefly that I have observed it.

Have you any interest in the fishing in that part of the Tay where the stake net fishings formerly were, but are now forbidden by law?—I am joint tacksman of a good many of them. Certainly I have an interest in catching as many fish as I can.

You are in fact the lessee of these fishings?—Some of them.

You said that you were informed they fished at Lord Kinnoul's cruive, in the river Earne, all the close time; do you mean the box is used for catching fish, or that people fish in the vicinity with nets and cobles?—It is both, with the engine on certain days, and with the net and coble near it.

You have already stated the periods at which the salmon fisheries commence and leave off in the different rivers and estuaries you are acquainted with; are those days fixed by law, or are the days fixed by the fishers?—Some of them are days fixed by law, and others of them I consider to be days fixed by the fishers.

State what you would recommend as to the commencement and ending of the fishery, with a view to obtaining the greatest permanent supply, and preserving most effectually the breed, in the rivers you are acquainted with?—I would recommend to begin at the 10th March, in all those places with which I am acquainted, and to leave off at the middle of September, about the 15th; although there may be some rivers where the fish enter more early than 10th March, still I think it would suit all parts better in the end, to begin at one time. I know that a great many good and wholesome fish can be got in September, about the middle of it, although there may be foul ones. Plenty of breeders would remain, as many as would breed millions of fish.

Do you consider that the same period for commencing and leaving off the fishery should apply to all the sea fisheries?—Yes, I consider it should apply to the whole, for although a great many of better and sounder fish might be caught there, still I think it would be an undue advantage given to one party over the other; but more particularly it would serve as a cloak for poachers in rivers, if there was a difference of close time for the sea.

Do you not consider that in those fisheries called sea fisheries, where there is no river contiguous, that clean fish might be caught every day in the year?—I consider there might be a few caught.

Do you think that in such a station many foul fish would be caught?—There would be some foul ones too.

Mr. John Johnstone.
(May 25.)

Do you think there would be a greater proportion of foul fish than of clean fish?—Yes, at certain periods.

Do you mean by foul fish, fish which have spawned or which are full of spawn?—Fish which have spawned and fish which are full of spawn, I mean both.

Where do you consider these fish going when they are intercepted by the nets in the sea?—I consider they are seeking some rivers to deposit their spawn at that period, I mean the spawning ones; and the clean ones are swimming along the coast seeking their food. The foul ones I speak of are those that have not spawned.

Does it consist with your knowledge, that fish which have not spawned are caught in January?—Yes.

Does it consist with your knowledge, that a great number of newly spawned fish are caught in February and March?—Yes, in rivers, a great number, particularly in February.

Are any caught in March?—Yes.

Why then do you propose that the fishery should begin before the end of March?—Because, although a few might be caught, I think it would be a pity to lose so many good and sound fish to the public as could be caught in March. In February and January there are few good fish in proportion to what there are in March.

What do you consider to be the proportion which the foul fish, fish which have recently deposited their spawn, bears to the clean fish caught in the month of March?—I consider there is not a tenth part of foul fish to clean ones. I cannot state this with certainty, but that is my opinion. We can save some of the foul fish that are caught, by putting them back again into the water if care be taken.

You have already stated, that you consider the close time should commence in the middle of September, do you not consider the time that you have so proposed for ending the fishery, too late in the season?—No.

At that period of the year, are not the greatest proportion of the fish caught full of spawn and roe?—They are all more or less full of spawn, but some are much fuller than others; but they are all getting full of spawn in the month of August, still I consider them to be in a wholesome state.

Are you satisfied that there would be a sufficient stock of breeding fish left?—Perfectly satisfied.

State your reasons?—Because I am aware, that there is near 20,000 salmon come to the London market after the middle of September; and calculating on a very small proportion of what every fish may breed, allowing liberally for what may be destroyed or lost, would produce above 100,000,000 of salmon, and that would be sufficient to stock all the sea coasts and rivers of Scotland; independent of which I do not take into account all that are caught and kitted in different parts of the country, and what are sold at the fishing stations. I merely calculate from the quantity sent to the London market, on an average of the last three years.

You have stated, that a great many foul fish are caught out of season; what is the general use to which these fish are applied?—They are generally kippered, sometimes salted, or sold fresh in the country wherever they could be sold; sometimes put into kits and the fish sent to London.

Do these fish get the same price as the fish caught in the legal time?—Sometimes they do when the buyer is not a judge.

When a fish is kippered, is it possible for a person who is not a good judge of a fish to know the difference between a good and a bad one?—If he is not a judge he cannot know, but if acquainted with fish it is easy to know; if he knows what part to examine there is no difficulty.

Can he know smoked fish?—A judge can easily know.

Can the common mass of people ascertain it?—No.

You have fished in September and October in the north of Scotland, can you furnish any statement showing the produce of your fishery during those months?—I can furnish a statement by giving me time: I have accounts of them in London. They are but small fisheries compared with the large fisheries, such as the Spey, the Dee and the Don.

Can you furnish abstracts, showing the number caught in the several months during the year?—Yes.

In

Mr. John Johnstone. (May 25.)

In what months of the year are the greatest number of salmon usually caught?—Generally in the months of June and July, but sometimes there are more salmon in May, but generally in June and July; sometimes in August there are more.

You say that most fish are caught in June and July, are those the two months in which the fish are positively better than in any other?—Yes, they are considered to be best in May and June, some are getting full of spawn in July.

Do you mean to say, that in May and June they are best in all rivers?—Yes, speaking generally; but there may be exceptions, there may be equal to three months difference between the quality of fish.

With regard to these 20,000 salmon, which you say come to the London market, do you mean they come from Scotland or abroad, you do not know from where?—They come from Scotland and from the Tweed.

You mean 20,000 salmon come to the London market after the middle of September?—Nearly 20,000.

You do not know whether they come from Scotland or not?—I know they come from Scotland and the Tweed.

The whole of them?—Yes; there may be a great deal more besides these, but I know of these. They come by the smacks from the east of Scotland.

You have spoken of the proportion of foul fish caught in March; with reference to fish in a sound condition, does the proportion vary at other seasons?—Yes, very much.

What is the season when there are most foul fish caught in proportion to sound fish?—In December, January and February.

What is the best season of the year for fishing with stake nets?—The spring and summer months.

Is it convenient to erect them in winter?—It depends upon the situation; generally speaking, it is not.

What does the inconvenience arise from?—From the roughness of the weather, and floating or drifting ice coming down from the rivers into the friths, and in part from the scarcity of the fish; we killed so few fish, it would not pay the extraordinary expense.

Generally speaking, during what period of the year would it pay the expense?—I should think, from the month of April to the middle of September.

There seems to be a difference between the fishing, in point of quality, up the river and near the sea, and in fairness it seems that the same fence months should not be fixed for both; are you of opinion, however, that the same periods should be named for both?—Yes.

State your reasons?—My reasons are, that it would give one class of proprietors the advantage over the other; that is to say, it would give some of the proprietors an advantage over the others.

Is not that an advantage that nature has given them, and that they ought to possess?—In some cases.

Would it not be an advantage to the public, and produce a greater supply of fish in the market?—No; I consider generally it would be so injurious to the breeding fish, to the foul fish, to the spawn and to the fry, that I do not think they should begin sooner than the time I have mentioned, excepting in stations near the sea, where there are few foul fish and no spawn and no fry, and where clean fish might be caught.

Is it your opinion that the clean fish hover on the coast long before they take the rivers?—At certain seasons they do.

At the beginning; at the opening of the fisheries in the month of March?—Not so much then as in the warm months.

Then you mean to say, that in March they generally take the rivers and are also about the coast at the same time; they are not more plenty on the coast then than they are in the river?—No, I think not.

Are the fish in the same state in the month of March on the coast, as they are in the rivers?—They are better generally. It depends on how long the fish have been in the river, and what part of the river it is.

Although you have stated, that you consider that the same close time should be applicable to both fisheries, the sea and the river fisheries; do you not think that the sea fisheries might commence and catch a number of wholesome fish before they could commence on the rivers?—Yes, I think they would.

Would

Mr. John Johnstone.
(May 25.)

Would that not be an advantge to the public?—Yes, it would be an advantage to the public, certainly, to get clean fish.

You think it would be very fair to all parties, that the commencement of the fishing should be at the same period?—I think so. It would give those heritors farthest up the rivers a chance which they have not hitherto enjoyed, and which they cannot have under the existing arrangements in most rivers. After the fisheries in the lower parts of rivers have begun very few fish get up.

Are there any local Act or Acts of Parliament applicable to the Tay?—I know of none.

Are there any regulations applicable to any of the rivers or estuaries or stations on the open sea, with which you are acquainted, other than the statute law?—None that I know of.

Do any practices prevail which are injurious to the fishery, and for which the law does not afford a remedy?—There are; such as fishing at unseasonable times, beginning too early to fish, and fishing all the year, in Loch Tay for instance, and unseasonable times in other places.

Is the law enforced, and to what extent?—The law is enforced to the extent of preventing us from fishing with the modes of fishing applicable to certain situations in the estuary; but it is seldom enforced for the protection of the breeding fish.

What do you think are the obstacles to the enforcement of the existing law?—Really I cannot say, but it is seldom enforced, excepting that when complaints are made, they are sometimes turned against the complainers by the agents of the parties; I know some instances where complaints were made, and boats and nets seized, and the person complaining was threatened and prosecuted for taking the boat and net, and fined for doing so; it cost him a good deal of expenses; that may deter others, which I have no doubt it does, from complaining.

And to your knowledge, was this net used during the close time?—I was informed it was; I am quite certain there is an immense quantity of fish killed in all the rivers in close time; in fact, the fishings are ruined for want of protection.

Do you know any thing of the practice of spearing or torch light?—It is often done.

Is there no law against it?—I consider there is a law which prohibits it in close time.

You consider the law applies equally to every description of fishing, whether with nets, rods, angling or any other species of fishing?—Yes.

They are equally illegal?—Yes, in close time.

Are you aware that measures are frequently adopted for putting a stop to them?—I am not aware that measures are often adopted.

Can you assign a reason for the non-adoption of measures to prevent a practice so destructive to the fish?—The reason is, that when people complain, the laws are not put in execution.

Then it is that the laws are not carried into effect?—Not carried into effect.

Do you conceive, if the upper heritors had a greater interest in the fishing, the law would be more enforced with regard to close time?—I do not consider it would; I consider they have as much interest now as they possibly can have, at any time, to preserve the breed.

Supposing they had more, would that lead to a stricter enforcement of the law?—Interest is a very powerful thing, it might induce some of them.

You have stated, that you are particularly acquainted with the Solway, and the fishings in the rivers leading into it?—Yes.

Will you have the goodness to state, whether or not there has been a great fluctuation in the value of these fishings of late years?—I believe there has.

Will you state, to what causes you attribute that extraordinary fluctuation?—To the want of protection of the breeding fish; to the fishing all the year over; to the destroying the fish all the year.

Do you attribute it solely to that cause?—Yes.

As you are very well acquainted with the history of the rivers leading into the Solway, do you, in point of fact, know that the upper proprietors of these rivers have as great an interest in protecting the fish now as they used to have formerly?—I consider they have just as great an interest as they had formerly.

Mr. John Johnstone.

(May 25.)

Are their fishings now let at as high rents as they used to be?—Really I do not know whether they are or not.

You have stated, that you lived many years on the banks of the Annan; do you, in point of fact, know that the upper proprietors get as high a rent now as they used to get for the fishings?—I do not know in point of fact; I think they do not.

Are you certain, or not?—I am not certain.

Do you know the fishings of General Dirom?—I do.

Do you know whether they let as high as they used to do?—I do not know.

Have you ever heard that they do, or do not?—I have heard that they do not.

Do you believe it?—Yes; I believe it.

You are certain of it?—I am not certain.

Do you know General Sharp's fishings let as high as they used?—I do not know.

Do you know in point of general report, that the whole of the upper fishings are almost without tenants?—I do not.

Have you heard the same fact regarding the fishings of all the upper proprietors of the Annan?—No, I never did; I know the Earl of Mansfield's fishings, which paid 300 guineas a year, for seven years, now let, I am told, at 50*l.* a year; but the fishings of Newby have risen in rent since the period I left them.

Are these not stake net fishings?—Yes; near to the river Annan.

Can you state nearly the number of fish now caught in the Solway frith, including the different rivers flowing into it, I mean caught by stake nets or otherwise; and is the quantity greater or less than what was taken before stake nets were used?—I cannot state the quantity; I have no accounts of it; they could be got at, but I do not have them.

You have stated, that a great quantity of spawn is frequently destroyed by nets; in what situations have you ever seen that destruction?—I never saw it; but I believe it as well as if I had seen it, both from what I have been told, and because I have seen the heavy rope go under the surface of the gravel, tear up the gravel and the stones, and bring on shore the smallest flounders; I am therefore certain it must destroy the beds of the spawn; I have been told by people fishing, that they have seen the eggs of the salmon turned out of the gravel.

You state, you have actually seen the gravel and some small fish taken, but you have never seen the spawn?—I have never seen the spawn.

Can you state any particular place where you saw the net drawn, which you say destroyed the spawn?—I did not say that I had seen the spawn destroyed; the net I saw tearing up the gravel, was in the river Annan.

At what distance from the sea; can you mention the name of the place?—It was below the town of Annan where I saw that; I have seen it also in the frith of Tay; I have seen the ground rope of a net get under the gravel and sand, and we have been obliged to go out with the boat and lift the net, or it would not have come ashore.

Have you ever seen any spawn with that?—Never.

Where do you believe that the spawning beds are in the river?—In the fords generally speaking; in running water generally.

You believe the spawning beds are in those situations where the net is used?—Yes.

Though you have never seen them?—I believe it perfectly well; it is impossible for me to see every thing; I believe it the same as if I had seen it.

Do not you know these nets are most commonly used in the pools, and not in the shallow running streams?—Where there is a number of small properties in different tenants hands, they are used indiscriminately upon the fords or pools, as it will answer; they will shoot the net at the top of a ford, and come over the ford into the pool.

Do you suppose that they drag these nets at such places, as to touch the ground where the spawn has been deposited?—The spawn is all across the river, from side to side of it in the shallows; it is often left dry at the receding of the water; it has been seen lying there.

You stated yesterday, that grilse are a distinct species from salmon?—That is my opinion.

Will you inform the Committee to what size the grilse are known to grow?—

Grilse

Grilse are known to grow to 10lb. weight; I have seen some even larger than that; I cannot state from memory exactly, without reference to my books. *Mr. John Johnstone* (May 25.)

Are there any particular marks by which grilse may be known at one, two, or three years old?—There are no particular marks that could distinguish their age after the first year; I could distinguish a grilse of a pound weight, and a pound and a half weight, which I consider to be a grilse of about a year old.

Is there any mark or appearance about any grilse, that can show it to be more than one year old?—Yes; I think there is.

What is it?—The mark is, he gets full of spawn; goes up the river and deposits the spawn, and is found in the spring coming down a kelt, going down to the sea to recruit his strength; and I consider he is above one year old then.

Is there any evidence to show, they ever are above two years old?—I could not say whether they were above two or three.

Do you not judge from the size?—No; I consider when they get full grown, they remain about that size till they are taken or die.

At what age do you suppose the grilse to arrive at its full size?—In a year, or 16 or 17 months; I consider them nearly full grown, when full with spawn.

You stated you know a grilse when it is about a pound, or a pound and a half weight, at which period you suppose it to be a year old?—Yes; that is my opinion.

Then when it arrives at the weight of 8lb. or 10lb. it must be considerably older?—It is older than a year certainly, at the time when it is getting full with spawn and going to spawn, that will be in the months of November and December; they are above a year old in June; they are a year old at the time when a year has elapsed since they went down the river as fry; after which they are full of spawn, they must be rather more than a year old.

Under what name does the salmon fry first re-appear in the rivers?—Young salmon or salmon smelts.

What size are the young salmon in the first year of their return to the river?—Some small and some large. I have seen one as small as four pounds and a half, five and six pounds, and so on.

What are the marks of distinction between a grilse and a salmon?—The principal marks are the tail and the head. The shape of the fish is quite different: the grilse is smaller and more forked at the tail; the salmon is straighter at the tail, not so much swallow-tailed, and the grilse is shorter in proportion; the salmon are more round and have a larger beak.

Then I wish to ask you, whether the young salmon that you speak of, as four and a half or five pounds weight, are like a salmon or like a grilse?—Like a salmon.

Is their head and tail shaped, when they are that size, exactly like a salmon?—Exactly like a salmon.

Mr. *John Halliday*, called in, and Examined.

YOU are a salmon fisher?—Yes. *Mr. John Halliday.*

How long have you been engaged in the salmon fishery?—About 40 years and upwards.

Of what rivers, friths and stations on the sea coast have you had experience?—In the river Annan, in the Solway frith, in the frith of Tay, in the Eden, in the frith of Forth, in the Esk at Musselburgh, in St. Andrew's bay, along the north coast of Scotland, as far as Montrose, in the South and North Esk, near Montrose, and in the coast to the northward of the North Esk, as far as St. Cyrus on the east coast of Scotland, along the sea coast; in the Lune, at Lancaster, where I was concerned in a fishing; in Ireland, at the Sewer, at Ballyhack and Passage, below the junction of the Sewer and Ross, along the sea coast by Duncannon fort; I have been concerned in the Ballyshannon and the Foyle, and in the Bush: these last are all in Ireland.

State during what periods you have had experience in these fisheries?—I was about thirteen years in the Annan and the Solway. I do not know at which of the two places I was longest; I was in them alternately.

Can you nearly state the year?—It was from 1784 or 1785 to 1797. I came to the Tay in 1797, and was there the greater part of my time since, going occasionally to other places: I went over to Ireland for part of some seasons; I have been in Ireland for months together, and occasionally at Montrose, and at

Mr. John Halliday. (May 25.)

at the frith of Forth occasionally, backwards and forwards, but I was principally engaged in the Tay for many years after I went to it, and my place of residence has for a great number of years been on the north bank of the frith of Tay.

You have a general knowledge of the state of the fisheries in these different places you have enumerated?—I have; but my principal knowledge is on the Tay and on the coast near the Eden, the frith of Forth and the different rivers near there, and in the river Annan and the Solway frith. I have been occasionally in Ireland in the fishing season, but I never stopped long.

Have you had any opportunities, other than those you have mentioned, of acquiring a knowledge respecting the salmon fisheries in any parts of the kingdom?—I have. I have travelled round the coast of Ireland, examining the salmon fisheries in that particular year in which Lord Kilwarden was taken out of his carriage in the streets of Dublin and killed; I do not recollect what year that was; I went round the coast of Ireland to Sligo bay, and round by the west coast of Ireland, as far as Ballyhack and Galway, and came round by the Shannon and round by Cork, and so returned to Dublin.

Then you went round three-fourths of the coast of Ireland?—I went round the greatest part of it. I was in almost all the counties of Ireland, and on the sea coast and along the friths and bays.

Did you ever survey any of the friths or any other part of the open sea coast on this island, with reference to the fisheries?—I went with John Little and Andrew Little along the east coast of Scotland, as far as the Donnoch and Frith, and returned again round the east coast of Scotland, and again round as far as the Cocquet, and examined the coasts this way.

State what fisheries you are interested in at present?—The fishings that I hold at present are upon the Esk, near the town of Musselburgh; I hold a fishing of the Hon. Mr. Lindsay, in St. Andrew's bay, but this is the last year of that lease. I hold a fishing of Mr. Dalgleish of Scotscraig, on the Tay, and Mr. Hercules Ross, in the South Esk, of Mr. Cernagie of Charlton, in the North Esk, and of Mr. Scott of Brotherton, in the same river, and of the Lord Chief Commissioner on the same coast. These are all the fishings I hold at present.

Mercurii, 26° die Maij, 1824.

THOMAS FRANCIS KENNEDY, ESQUIRE,

IN THE CHAIR.

Mr. *John Halliday*, again called in; and Examined.

Mr. John Halliday. (May 26.

FROM your own knowledge, can you state in what places the salmon spawn?—Yes, I can; they generally spawn in the running water at the foots of fords and the tops of fords where the gravel is fine, and low down in the foot of pools where the water begins to run, so as to assist the salmon in removing the gravel; I have seen the spawning beds there.

At what time in the year do the roe and melt appear in the salmon, and at what time do the fish become full and ready for spawning?—Some earlier than others; in this present month, they are about the size of one's finger; some of them larger and some of them smaller, according as the salmon is advanced towards the time of spawning; in about the month of October, they are generally quite full of spawn, and ready for spawning, and some of them are still unspawned early in January.

Are you now speaking with respect to the Tay, or generally as to the rivers with which you are acquainted?—Generally as to the rivers with which I am acquainted.

At what time do the salmon leave the sea, and ascend the rivers for the purposes of spawning?—From about the middle of August; they would remain in the river, if they were allowed, until they had spawned, before they sought to the sea again; but in the end of August they begin to get much heavier with spawn

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(May 26.)

spawn than about the twelfth; both melt and roe swell fast about this time. I think the melt is longer in advancing in the belly of the male, than the spawn is in the female; towards the end of August, both melt and roe is considerably advanced, so much so as to lessen the quality of the fish at that time of the year; the fish then ascend the rivers for the purpose of spawning.

Are there not many salmon which leave the sea and go up the rivers in the spring and summer months?—Yes, there are a great many, which go up the estuaries, and immediately go down again, and there are a great many which go up the rivers.

Do these fish all remain in the rivers until the proper spawning season, or do they go back to the sea?—They go back to the sea, those that are not taken; but the rivers are so well fished now, that few are left to go back compared with what there used to be; many used to come down the rivers; when the waters became muddy and swelled by the rain, the fish came down to the sea again.

At what season do you mean they come down?—At all seasons of the year, when they have been any length of time in the river; they come down again when the water is foul.

State your reasons for saying that those fish which are not taken, go back to the sea?—I have a very good cause of knowledge; I fished the Annan for many years; and there is one pool in particular, namely the Sand Pool; although we had fished this pool quite clean of fish before the rain came on, yet whenever the rain did come on, we then continued fishing constantly, until the water rose so high that we could not manage it, and we got the salmon and grilses coming down the river all the time into the pool; some of them had the appearance of having lain long in the water, and were very much exhausted, quite changed in the colour, as if they had hung in a smoky chimney for some time; others were very red in the skin, by having been in the fresh water for some time; I have known us take 103 fish in one night in that pool after the rain commenced, although we had fished it clean immediately before; our opinion was, that the fish came down from the river above out of the rocky waters of Bridekirk, Loos and Hoddam; the reason for fishing the pool at that particular time was, that the river at the foot of it parted into three small branches, and the pool itself was very deep; when the water was rising, the fish could not find their way so readily down there, and they turned into the deep pool, and we kept drawing constantly as long as we could manage the water; I have been at the taking of above 100 in a night there, salmon and grilses.

If the salmon were to remain in the fresh water, would they fall off in condition?—They would, very much.

Would they be in that fat state in which they are found at the time of spawning?—They would be in a very exhausted state; but salmon are not in a fat state at the time of spawning, they are in a very poor state; they fall off as the roe and melt advances in them; the fish get quite covered with slime when they are full of melt and roe; and particularly when they are in the fresh waters, they turn as slippery as an eel; some of those we took coming down the water of Annan, were what we call "Moffat-men;" a term used for exhausted fish, fish which had been at the head of the water.

You mean to state they were fish not in a high condition?—Quite in a bad condition; some of those we took had their gills almost eaten through with maggot worms, by being so long up the river.

What do you conceive to be the object which induces the fish to visit the rivers at these early periods?—The reasons are, no doubt, in search of food, and to clean themselves of the sea-louse, an insect that fastens to them in the sea, and with which they are infested when they come out of the ocean, but which die in the fresh water. They find a great deal of food in the estuaries on the banks. I have taken a great many salmon in the frith and estuaries with worms passing through them; such worms as are to be seen on the banks.

Are fish ever found with worms in their gills, except those which have been recently in the fresh water?—Not with worms of that description.

At what time of the year do the salmon deposit their spawn?—In November, December, and the beginning of January.

Is it deposited in furrows in the gravel?—It is.

Describe the process of depositing the spawn?—When they proceed to the shallow waters, which is generally in the morning, or at twilight in the evening.

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They play round the ground, two of them together. When they begin to make the furrow, they work up the gravel rather against the stream, as a salmon cannot work with his head down the stream, for the water going into his gills the wrong way drowns him; and when they have made a furrow, they go a little distance, the one to one side, and the other to the other side of the furrow, and throw themselves on their sides when they come together, and rubbing against each other, they shed their spawn both into the furrow at once. I have seen three pair upon a spawning bed at a time, in the Annan. I have stood and looked at them, both while making the furrow and laying the spawn.

What becomes of the parent fish after spawning?—They generally betake themselves into the pools, for it requires some days before they are done with the act of spawning. They do not lay it all at once. It requires from about eight to twelve days for them to lay their spawn; and when they have done, they go into a pool to recruit themselves; and in about a fortnight or three weeks thereafter, then the male fish begins to seek his way down the river. The female fish remains longer about the spawning ground, and I have very often found some of the mother fish going down a kelt as late as when the first of the fry began to come down the river.

In what month?—In the end of April and beginning of May, I have taken five at one haul in the river Annan.

What do you mean by the denomination of kelt, as applied to a salmon?—A kelt is a fish after it has spawned, going down to the sea. I have often taken a number of these kelts with the skin rubbed off below the jaws, just between the *chowk* fins, almost the size of a half-crown, with rubbing up the gravel and making the holes for the spawn.

You wish the Committee to understand, that you can at all times distinguish the male from the female fish?—Yes, I can, at all times; and they are much easier known after they begin to have the least spawn in them; a male fish's head is always longer in proportion to his size than a female, and it begins to shoot smaller at the point.

At what time do the young fish rise from the gravel, and come down the rivers?—I have seen them in life at the end of March. I do not know how long they might have been in life before then, but I have seen them living at that time.

But, generally speaking, at what time should you say that the young fish came into life?—I think they generally come into life in the end of March, or from about the middle of March to the end of it; but I do not think they come all into life exactly at one time, but nearly so. Some of the fry appear to be much larger than others, and I do not see the young fish so plentiful at the sides of the water at the first, as after some time.

Within what two dates should you conceive that the fry in most rivers come into life?—I think from about the 10th March to the 10th April, is the time I have seen them coming to the edge of rivers, and living.

By coming into life, do you mean the spawn, or the young fish being disengaged from the spawning beds?—I mean the young fish being disengaged from the spawning beds; I have seen them with the small skin of the ova sticking at their nose; just a scale like a skin.

Can you describe the progress of the fry in the Tay or other rivers with which you are acquainted, down to the sea?—Yes, I can; I used to be a great follower of the fry in my younger days; I used to be a keen rod fisher, and I have killed many a hundred dozen with the rod; I have killed above 20 dozen with the rod in one day; I found them always take the fly best after they had just reached the top of the tide, and when the tide had left them, they were then about three to four inches long. At the time I observed them first, they were in the easy fresh water about the sides of the river; afterwards, when they became stronger and larger, they betook themselves more into the middle stream, and when the water was swelled a little by the rain, they came gradually down the river; when their young constitutions are inured to the change, they go off to the sea all at once sinking down in the bed or channel in the middle; after they met the tide, they remained in that part of the river for two or three days, at the point where the water become a little changed or brackish with the sea water, until they met the tide.

What time do you consider that they take in going from the upper parts of the

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the river to the sea?—From the first time that I have observed them, I think about the end of March or beginning of April; they come down until about the 10th or 12th of May; I have seen them in the middle of May, and as late as June in a particular dry season, when the river had not been flooded; I have known them kept up in a small river above a dam dike until the grilses had entered the river in June; they could not get down for want of water, and they would not take a fly then until it was the twilight.

With reference to the Tay, when should you say that the whole fry had reached the sea?—I think the whole salmon fry in the Tay have reached the sea by the end of May.

Do you entertain the same opinion with reference to other rivers with which you are acquainted?—I do; I have noticed them in the North Esk; this year I was down in the north country, just when I got my order to come up here; I was at the side of the Esk, and the fry was in it then.

Have you any knowledge of the number of ova in the roe of a salmon?—They are not all exactly of the same number; I have found them of different numbers, from 17,000 to 20,000.

In what manner have you acquired this knowledge?—By boiling the roe and counting as many as would fill an egg-cup, and then measuring it.

Do you believe that each of the ova produces a young fish if it be not injured?—I do; I believe that one should come out of every egg.

Are you acquainted with the fish known by the name of hirlings, whitings or finnocks?—I know them by all those names.

Do you mean that the Committee should understand they are all one and the same fish?—They are one and the same fish. In Carlisle they call them whitings: in Annan hirlings, and in the North finnocks.

Are they very plentiful in the Solway?—Very plentiful in the Solway.

Are they equally plentiful in the Tay?—No, I never saw any in the Tay; but I have taken 100 dozen in the Annan at one draught.

Be so good as to describe this fish?—It is about 12 inches long. It is a small fish very near the shape of a sea trout.

Do you consider this fish to be the young salmon?—No.

What are your reasons for your opinion that they are not the young salmon?—My reasons for believing that they are not the young salmon, are, that when they go up the rivers, they are as full of spawn for their size as the salmon is, and when they come down in the spring of the year kelts, we are getting the young salmon. Besides they are not to be found in all rivers where salmon are found, which they would be if they were the young of salmon. There are many rivers in which they do not get any of them. I never took a hirling in the Tay in my life, for as long as I have been at it, and they are plenty in the North Esk and South Esk.

Is there any difference in respect of the colour of their fins from salmon or salmon fry?—Yes, there is. The hirling has a lighter coloured fin than salmon or grilse.

Is there any difference in the shape of the head and tail of the hirling from those of the salmon fry?—There is; the tail of the hirling is straighter than that of the salmon or grilse, and it is quite a short-headed fish; neither does the head of the hirling shoot like that of the salmon when it is going to spawn. I never saw any of them shot in the head.

To what size have you ever known the hirlings to grow?—I never saw them much above half a pound. The largest I ever saw was about three quarters of a pound.

Do you consider the grilse to be the salmon not full grown, or is it a different species of fish?—It is quite a different species of fish.

State your reasons for believing that the grilse is a fish different from the salmon?—The shape is very different. In the first place, a grilse's tail is very much forked, like that of a swallow's tail; a salmon's tail is not forked like that of a grilse, and the chowk fins of a grilse are much more blue in their colour than a salmon's; a grilse is much smaller at the head and immediately above the tail than a salmon is; it seems to be a different fish in shape every way; besides, it goes up, full of spawn, in the end of the year, and does not come down till the spring, when it is a kelt grilse, while the young salmon are coming up the river in numbers of at least fifty young salmon for every kelt grilse that returns to the sea.

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Are there in some rivers a great number of grilses while there are almost no salmon?—There are a great deal more, in proportion to salmon, in some rivers; in some of the Irish rivers they are almost all grilses together at certain seasons of the year.

Is the proportion of grilse to salmon greater than usual in the North Esk?—I am not so much master of that, because I have not been a very long time attending to the North Esk.

Can you state where grilses spawn?—They spawn the same as the salmon.

What opportunities of knowledge or observation have you?—I have frequently seen them spawning in the autumn.

You mean the Committee to understand, therefore, that they go up loaded with spawn and come down kelts, in the same way as salmon do?—Precisely in the same way.

Are grilse distinguished from salmon by their being uniformly of a smaller weight, or are salmon sometimes of a smaller weight than grilses?—In the spring of the year, I have seen some of the salmon of less weight than the grilses; I have seen a grilse eight or ten pounds weight, and the salmon only four or five pounds weight; what we call the young salmon.

Have you, at the same moment, found a salmon and grilse in the same river, the salmon being smaller than the grilse?—Not in general. I do not know of any circumstance in my recollection, just now, of that kind; our salmon in the Tay, at that season of the year, is larger than the grilse; but I have, in the same year, in the spring, caught the salmon much smaller than the grilses.

Are there any marks which distinguish a young grilse at two or three years old?—Not that I have been able to discover.

Is the grilse smaller at the tail, in proportion to the rest of the body, than the salmon?—Yes, it is a great deal smaller.

Is the tail of the grilse more forked?—Much more forked, more of the swallow tail.

And the snout more sharp?—The head smaller and the snout sharper too.

Do you consider what are called the sea trout to be a distinct species from the salmon?—I do.

State your reasons for this opinion.—It is to be found in abundance in some rivers and not in others; besides, the shape of the fish is that of quite a full grown fish, and they go up to spawn in the same way as all the other fish do, and they come down kelt-trouts in the spring of the year (the few of them that may be left), and at the same time that other kelts are coming down. I have taken, in the same draught, kelt salmon, kelt grilses, kelt trouts, and kelt hirlings, when they were on their way to the sea.

You consider you cannot be mistaken as to the sea trout going down as a kelt?—I am quite satisfied they go down kelt trouts in the spring?

That no circumstance of its detention in the river can produce a similar appearance to a kelt?—No detention in the river will produce the same appearance.

Is the sea trout different in its form?—It is shorter in the head, and a shorter and thicker fish; the tail is not forked like the grilse at all; it is nearly straight when you spread it, the grilse is quite different, and more forked than the trout is; besides, it is just as full of spawn when it goes up the river as either the salmon or the grilse are.

Are sea trout to be found in all rivers, bearing an equal proportion to the salmon?—No, nothing like it; in the Annan I have known us get more sea trouts in one day, than we shall get in the Tay in a whole year. I have known us get 100 dozen in the Annan in one day.

Are there in the Tay a great number of sea trout compared to the salmon?—They bear a very small proportion in the Tay compared to the salmon; the smallest proportion of any river I ever knew.

Have you fishings in the North Esk?—Yes, I have; I have fishings all the way up the North Esk, about a couple of miles above the Northwater bridge, and down to within a few yards of the mouth of that river.

Do you fish those fishings by net and coble?—I do; I fish constantly in different stations, and I fish the whole water by net and coble occasionally.

Do you consider that your mode of fishing by net and coble injures the spawn and spawning beds and the young fry in the river?—It must do that; we cannot fish without doing it. I have one particular station, what they call

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The Nabb, where my men haul their boat and net up over the ford about 150 yards every shoot they make, and they haul the net down over the ford to below the foot of it before they take it on shore. It has been the constant practice to do so ever since I remember.

State to the Committee the mode in which the net operates injuriously to the spawning beds or the young fry?—The water is shallow, and the net immediately falls to the bottom, and it is trailed along the bottom, over the top of the spawning beds, from one side of the water to the other; the fishermen in the boat, dragging the net, go over and across the river and as near the other side as they can get water for their oars. They frequently run the coble aground on the opposite bank when making the shot. Then they turn the boat, and they draw out the net by two ropes, dragging her along the bottom all the way. The man goes out and leads the net so far down in his hand. They would not get the fish if they were not to do so.

You state to the Committee, therefore, that you cannot use your nets in that part of the river, without injuring the spawning beds?—It is impossible to use the coble net, the common coble net that has been used there for such a length of time, without injuring the spawning beds that come within its range. We have very strong ropes made of old nets, and with round circles of heavy rope lashed to the ground rope of the net to keep it down; sometimes we tie stones to it to keep it to the bottom, and sometimes we put two cast metal sinkers. It is generally in the spring that we require the heaviest weights at the bottom of the coble nets, on account of the river being heavier or more full of water at that season. If thousands of fish should breed in the river, it would be impossible for spawn to come to perfection where we are constantly fishing over them all the twenty-four hours with coble nets.

Do you mean that this opinion of the injury that the coble net does, applies also to the fry?—I have seen them take out a good deal of fry with the coble net; the centre of the net, what they call the bag of the net, is made of a different description, narrower in the mesh and deeper than the arms of the net. It is frequently like a large narrow meshed bag placed in the middle of a coble net; we cannot help the fry going into it, and being sweeped ashore. When a shot is made, and the arms of the net brought on shore, the fry see the net moving through the water, and they fly before it until they are incircled in the narrow meshed pock, when many of them are swept on shore.

Is it your opinion, that the same injury must arise to the spawning beds from the use of the coble net in all rivers generally?—I think, in rivers where the coble net is used generally, it is much worse than where it is only used at particular stations, because a part of the bed of the river gets clear when it is only used at particular places; they usually fish the whole fords in the river from top to bottom at pleasure, with ground ropes trailed along them.

Do you state, that the net which you use, and which is injurious to the spawning bed, is in use in other rivers?—It is in use in all the rivers that I know.

Do you wish the Committee, therefore, to understand, that in all rivers there is a considerable destruction of the spawning beds by the use of these nets?—Most unquestionably, a very great destruction indeed; I consider they are one of the greatest destructions to the spawning beds; I have waded over spawn beds 20 times, and seen them in the very places where we fished; when I knew the under rope of the net passed over the bed, I have gone and examined the top of the beds; I have myself been at such fishings in particular at the foot of the Sand Pool in the Annan, where we drew the net constantly on the top of the spawning beds.

Do you from your own knowledge state to the Committee, that there are spawning beds on these fords?—Yes, I do, both at the foot of the fords and the tops of them.

Have you seen these spawning beds?—I have frequently; I have waded over them barefooted.

State what you observed when you made such an examination?—I found the whole of these places like the places where I had seen the spawn deposited; the spawning bed is easily known by the thrown up gravel; when I took my foot off the hard gravel, and put it on the spawning bed, it was quite soft; it was much lighter in appearance at the bottom of the water than the hard gravel; I knew it was the salmon that had moved the gravel.

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The Committee are to understand, therefore, that you have seen these proofs of the spawn being deposited at the places you have mentioned?—I have.

Have you seen the spawning fish themselves on these beds?—I have on some of them.

Do you, therefore, form the conclusion, from what you yourself observed, that your own nets having been dragged over these beds caused a great destruction of the spawn?—I was quite satisfied of it.

Is there any difference, as far as relates to the nature and operations of the nets, between the nets and mode of fishing used by you in the Esk, and what are used in the Tay?—No, they are exactly the same; the mode of fishing in the Esk is exactly the same as that used in the Tay; it is net and coble; the only difference in the Tay, they have more power in hauling the net ashore; they use winches and capstans in the Tay; by which means, they can add more weight to the bottom of the net, if they like.

Are the coble nets and modes of using them nearly the same in most rivers?—They are; they have a kind of coble net in the Annan, which goes by the name of trows; but the operations of the net are much the same; the trows are wrought by a shaft in the place of oars.

Then is the Committee to understand, that you believe the effects of using the coble net, in respect to its injuring the spawning beds, to be the same in all rivers with which you are acquainted?—It cannot be otherwise, where there are many cobles and nets used, than destructive to the spawn.

After directing the coble net, have you yourself, in point of fact, seen the spawn dislodged from the beds, and floating in the water?—I have seen something floating in the water; I never caught it, to look what it was, but I have seen it floating with the stream at that time when the net and rope had passed over it.

Do you wish the Committee to understand, that in your opinion, what you saw floating was salmon spawn?—I could not positively say it was; I attended to the fish in the net.

If you are uncertain as to whether this substance was salmon spawn or not, how are you certain that the coble net has the effect which you state?—From the weight of the rope and net constantly driving over a spawning bed, it is impossible for the spawn to come to perfection; for you might just as soon have a bed of onions to come to perfection if a coble net and rope was dragged over it, tearing up the mould 20 times a day; I would take my chance of the one as soon as the other.

Can you speak as to the point of the injury by coble nets to the spawning beds, in any of the rivers which run into the Tay?—The Annan particularly; I fished a long time there, and have dragged the net over beds where I had seen the fish spawn, where I have seen many fish upon the bed at one time.

And have you observed any injury to the bed, which was visible to you, from the operations of the net?—I have seen it remove the light gravel. The spawning beds are a little higher at the bottom, among the black gravel, and the under rope of the net acts as a dredge; for coble nets are made about a fathom and a half shorter in the under than the upper rope; and whenever there is a pressure laid on the net, it presses forward the under rope, by being so much shorter than the other, and thereby drags down into the spawning bed.

You stated, that after the spawn was deposited, the male fish forced up the gravel in order to protect it; have you, from your own observation, remarked, that this gravel has been displaced by the operation of the coble net?—Yes; I have seen the under rope of the net level down the spawning beds.

Are the fry of the salmon ever destroyed by being dragged on shore by the coble nets?—Yes; I have dragged a number of them on shore with the coble nets.

Having yourself done so, be so good as to state the time and place where you did so?—I have dragged them on shore at the Howes Pool, on the river Annan; in the Bridge Pool, at the Bridge of Annan, where the boys used to gather them up; and at the old Mill Pool I have hauled out a good many.

What was the size of the meshes of the coble net with which you so dragged the fry on shore?—I think it was about an inch between the knots, or about four inches in circumference; the ends of the net were not quite so narrow as the centre of it.

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How much were the sides between knot and knot?—Probably about an inch and a quarter, or scarcely so much; but the centre is always narrowest.

Do you mean us to understand, that coble nets are in general so narrow in the mesh as an inch and a quarter?—They are of different sizes in the meshes; some of them are not an inch in the square; others are about three inches between knot and knot.

Are many coble nets used which are not wider than an inch, or an inch and a quarter?—There are a great many.

In many rivers?—In many rivers.

Are there a great number of the fry destroyed by milldams?—There are immense quantities.

State what you have had occasion to observe in this respect?—I have seen the miller taking out his creel in the morning at the Newby Mill, and taking basket-fulls out of it; and I have seen great quantities lying dead in the dam behind the mill-wheel in the morning; I have also known the miller to put in a heck in the small side sluice, by which means great quantities are destroyed in the night time when they set the water off the wheel, through the side sluice; there has been so many taken by some of the mills on the Annan, that sometimes they have fed their pigs with them; the dam dikes conduct the fry, when coming down the water, into the mill-dam, and when night comes on they do not see, and they seek their way down the dam, and so they go into the miller's heck, or basket, and are all taken.

Is it your opinion, that any regulations could be devised by which the fry might be prevented from going down the mill streams, without inconvenience to the mill?—Yes; it is my opinion, placing a heck across the narrow part of the dam, and making a sluice through the dam dike at the upper side of the heck, would allow the fry to pass down the sluice into the bed of the river, and the heck would prevent the fry going down the mill dam.

Should you think it advisable, that there should be a double heck; one near the mill, so as to send back any fry that might occasionally come down towards the wheel?—I think it would be better to use a second heck across the side of the race which goes into the wheel, but it would not send back the fry; it would allow them to pass down the side close.

The regulations which you have proposed, will apply to certain stations; are there any other modes of securing the same object, which might be applicable to other places?—What I have stated would apply to most of the rivers, except where there are manufactories and bleach-fields, skinneries and dyeries; they poison the water, by allowing the refuse to go into the small fishing streams; by this means they destroy the whole fishing in the summer time, when the water is small. They ought to be obliged to filter their refuse, so as not to poison the fish, or to make a place for depositing the refuse; the alum and vitriol they turn into the fishing rivers destroy the whole fishing streams, particularly in summer, when there is little water, and they empty their vats into the rivers at this time.

Does the witness think, that it would be any greater disadvantage or increase of trouble to the miller to clean these hecks, than to clean away the rubbish and stuff that goes down to the mill-wheel?—It would be a great deal easier for the miller, in general, because he would find all the rubbish at one place; it would save his mill-wheel from so many sticks and things that would run into it; it would prevent the sticks and stones from coming down and breaking the wheel.

In the autumn, when the leaves fall off the trees, are you not aware, that they come down in constant succession, and stick on such hecks, and require to be cleaned many times in the course of a single day?—Not in a single day; the leaves float very much on the surface for a long time. If the heck was properly constructed, by placing it slanting, the under part of it inclining up the water, and the upper part of it down, it would raise all the dirt to the surface of the water.

Is it your opinion, that all such hecks should be placed with that inclination, in order to obviate inconvenience to the miller?—I think so.

Do you know of any station where such a heck is placed?—Not one.

Then you can state nothing from experience as to obstructions upon these hecks?—Nothing from my own observation.

What are the modes of fishing which have been or are now in use in the various

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various rivers, estuaries or sea coasts with which you are acquainted?—There are a great many.

Be so good as to state them?—Coble nets, pot nets, hang water nets, rake nets, sailing nets or floating nets, half net fishing, pock net fishing of different kinds and toot net fishing of different kinds, stake net fishing, stage net fishing, cruive or cut net fishing, and a number of other modes which I do not recollect.

You mean to state that these are the principal modes of fishing which are resorted to?—Yes.

Are all those modes of fishing authorized by law, or are any of them deemed to be illegal?—They are not all authorized by law, some of them are deemed to be illegal; stake net fishing is deemed to be illegal. They have been put down in different places by the law.

Are stake nets authorized in the Solway and its tributary streams by special statute?—I have heard it stated so. I have seen it in print that they were so.

Do any of the modes of fishing which you have enumerated tend to the undue destruction of salmon or the salmon fry?—Yes, they do.

State what are the modes of fishing, which in your opinion tend to the undue destruction of salmon and salmon fry?—I think the coble net fishing in rivers tend most to the undue destruction of salmon and the fry and spawn of salmon.

State the grounds on which you entertain this opinion?—From the practice I have had in the rivers, of using and seeing that kind of fishing used, together with what I have seen others doing, by dragging the nets constantly along the bed of the river to catch the salmon, I am satisfied they kill the mother fish in the commencement of the season when the parent fish are to be found in the rivers, and then continuing, after that time, to operate entirely upon the bed of the river, they destroy the spawning beds by the under ropes of the nets, as I have already stated.

Do cruives destroy the breeding fish?—Not if they are properly constructed and regulated.

Would any of these inconveniences be abated by a proper regulation as to the season?—They might be very much abated if the season was altered.

Are there any and what improvements in the modes of fishing which might be established?—Very considerable improvements could be made in the stake net fishing as well as in some of the floating nets; I am of opinion that the stake net and toot net modes of fishing are capable of the most improvement.

By what modes of fishing, in your opinion, can the greatest quantity of salmon fit for the market be permanently supplied?—By the stake net fishing in the friths, estuaries and sea coast; and by coble net fishing and cruive fishing in the rivers; and also by toot net fishing in certain stations upon the estuaries, friths and sea coast.

When were the stake nets first introduced?—Since before I remember in the Solway, and in 1796 they were introduced into the Tay.

Be so good as to state to the Committee the progress made in the use of stake nets?—There was a very great deal of progress made in the Tay. The number of stake nets from 1797 to 1810 was from one net to above thirty in the Tay.

Were they introduced also during the same period, along the north-east coast of Scotland?—Not until after that period, when I placed the first one near Arbroath, and some years after that I set them in St. Andrew's bay and along the coast.

At what distance from any river were these stake nets you set in St. Andrew's bay?—About three or four miles.

When the stake nets were introduced in the Tay, what was the result?—There was an immense additional quantity of fish taken in all parts of the Tay, beyond what was taken before their introduction. We killed a great deal more fish then than was ever taken before or has been taken since the stake nets were taken down; the success was particularly in the proper salmon season, in the months of May, June and July.

State as nearly as you can the produce of the stake nets in the Tay, when they were in full use?—I think the produce of the stake nets in the Tay, when they were in full use, was from about 26 to 30,000 fish annually.

Do you consider that a greater produce might have been obtained, had those nets

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nets been continued and extended?—A much greater quantity would have been obtained.

To what extent do you think this increased produce might have gone?—To a very great extent, if the fishings had been properly taken care of in close time and the fry been protected, at least to the extent of four or five times what was produced during the existence of the stake nets in the Tay.

Are there stake nets in the Tay now?— None.

When were they removed?—There was one condemned as late as last year as being in the Tay, but it is still a question in the House of Lords, whether it was not in the ocean; in 1805 the Seaside net was put down; and 1812 or 1813 the other nets were removed down to Broughty Castle; and in 1817 or 1818 they were all ordered down below Broughty Castle.

What are the modes of fishing now in use in the Tay, where the stake nets formerly existed?—In many of the stations there is no fishing at all; I believe there is none either at Seaside, Birkhill, Castle Huntly or Milfield, and very little at the other stations.

Can you state the produce now at those stations, where the stake nets were formerly placed?—I believe the whole produce would not come to more than a seventh or eighth part of what it was then; I do not believe there is above 4,000 fish caught below now altogether.

Is the Committee therefore to understand, that what was formerly very productive, is now comparatively unproductive?—Yes, very unproductive, indeed.

Is this occasioned by the state of the law, or by the parties having chosen not to fish the stations?—It is occasioned by the state of the law.

Are there any modes of fishing other than the stake nets, which, in your opinion, would increase the produce of the fisheries if the state of the law allowed the use of them?—There are.

State those modes?—There used to be stage nets at some of those stations; when I came to the Tay first, there were seven or eight; they were taken down when the stake nets were erected; and now when stake nets are removed, they are not allowed to restore the stage nets which would be good modes of fishing, although not nearly equal to stake nets; floating nets might be used to some advantage, but they have been also stopped; when the stake nets were taken away, places for hauling the nets upon, (the coble nets,) were made, but these have been also ordered to be taken out and interdicted.

Had these modes of fishing been tried and then abandoned?—They have; they have been used, but interdicted and stopped by an order from the courts of law; there was a shot made to haul the net upon, and it was stopped too by the law, although there have been a great many shots made up the Tay, in the river, since I came.

Were the stake nets in the Tay peculiarly destructive of the parent fish, after spawning?—No, I have fished some seasons and have not seen above two kelts the whole season in the stake nets.

To what extent had you experience of the stake nets in the Tay?—I had very great experience; I think I had about 13 or 14 stake nets there of my own putting up and constructing, which I attended to at one time, and I had some stake nets when all the others were down; I had them along the shores on the north side below Broughty Castle, beyond the lights of the Tay.

Can you speak from your own knowledge as to the actual number of foul fish taken by the stake nets?—Yes, I can; I have fished them many seasons; I remember fishing from Broughty all the way round to beyond the lights, and all the stake nets in the bay, about nine or ten of them; and I have not seen a single kelt in them all some seasons, although I had some of the nets up and ready for catching, at the time the Tay opened on the 10th December.

Is the Committee to understand, that the stake nets in the estuary of the Tay, were less destructive of the foul fish than the coble nets in the river?—A great deal less destructive than the coble nets.

State the reasons?—The stations of the stake nets are between the high and low watermark, and I found that kelts do not generally resort to that particular part of the shore; it is much the same as to fish going up to spawn. I remember, when the account was kept at Sea-side of the number of salmon taken in the sea-side net, that the fishings fell very materially off about the middle of August and to the end of it; I have caught several thousand fish in a year there, yet

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there were very few taken betwixt that time and the end of the season; the fish, as they began to become full of spawn, declined visiting those stations, they betook themselves more to the deep channel, the mid-stream, and through it sought their way up the river. I find all the sea stations begin to fall materially off as the season goes on, the fish do not visit them half so much when the spawning time approaches as they do in the summer months; towards the end of August the stake net fishing falls off very materially, the fish then keep the channel. These are the reasons why I think the stake nets are not destructive to the *foul fish*, but the coble net in the rivers is used in that part where the spawning salmon have collected. On the 10th December, when the rivers Tay and Forth, &c. open, then the foul fish are nearly all taken by the net and coble. I never saw any fry in the Tay, and I have been at them since the year 1797.

Do you consider that the stake nets interfere at all with the spawn?—Not in the least; they cannot, it is impossible from their station; there is no spawning in the stake nets, and they remain still. Suppose a fish was to spawn in a stake net, it would never interfere with the spawn, for it does not trail over the ground to disturb the spawn; but no fish spawn there.

You have stated that stake nets are not at all destructive of the fry?—Not in the least.

Did you ever know the fry detained in the stake nets mixed up with sea weed and other rubbish?—Never; and they could not be there without being seen by me, it was impossible.

What was the general size of the meshes of stake nets?—About three inches from knot to knot, or twelve inches in the square.

Were the meshes ever closed by sea-weed?—Sometimes at the foot of the net, but we cleaned them every tide, or otherwise the sea would break them down; but it was very seldom they were closed; it was only at the bottom of the net, and at certain seasons of the year, when the summer's growth comes up out of the sea, about the month of July, for a short period. I went all along the stake nets three weeks ago, and they were as clean as when they were made, and there was not fry of any description in any of them.

Where were the nets which you say you then examined?—In St. Andrew's bay, and in the bay of Montrose, and along the coast from Montrose away north to Woodsten.

If stake nets were neglected, so as to be obstructed by sea-weed, would the tide have any effect on the nets?—It would break them down, or take away the ground from below them. I have seen, where there was seaweed left upon the net, that the tide would have taken away the very clay from the foot of the stakes two or three feet deep, and the salmon have frequently gone through below the net and been lost when this has happened.

Then is the Committee to understand, that the meshes of the nets could not at any time have been completely closed up by the seaweed?—I have seen the seaweed in some tides very plentiful in the bottom part for two or three tiers, but there is always an immense quantity of water above where the seaweed is; the seaweed that sticks to the bottom of the net floats horizontally with the tide, and does not interrupt the water or any thing in it. I have already said, if the seaweed were to close the net, it would be broken down; I have had the stakes broken, and the nets thrown down by seaweed, when the meshes were not nearly fully closed by it.

Have you ever seen any other kinds of fish than salmon in the stake nets on the Tay, or elsewhere?—Yes, I have.

What sort?—I have seen turbot, and skate, and hallibut, and cod and flounders.

Have you seen fish ever left in the pools or lakes on the banks where there are no stake nets?—Yes; I have often seen the fry of garvies in the holes upon the shores, that was left by the tide.

What were the effects of the stake nets, in the Tay, with reference to the fisheries in the upper parts of the river; was there a diminution of the produce above, corresponding to the increase below?—Nothing like it; there was no diminution above corresponding to the increase below.

Was there, in point of fact, any diminution of the upper fisheries at the time the lower fisheries were very productive?—I believe the upper fisheries might have fallen off a little, but it was but little, in comparison to the increased quantity

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quantity below; and I believe that, during the time of the stake nets, the upper fisheries did not fall off more than they did for as long a period before the stake nets were invented in the Tay, or even than they have done since they were taken out; all the fishings in Scotland that I know of, have fallen gradually off these many years.

If there was a decrease of the upper fisheries during the existence of the stake nets, do you attribute such decrease to the stake nets, or to any other causes?—I attribute the decrease to other causes; not to the stake nets, but to the destruction of the parent fish, the fry and the spawn in the rivers above the frith or estuary.

Do you consider that the same causes which produced a decrease formerly, continue to decrease the value of the upper fisheries?—The same causes are still operating.

Does it consist with your knowledge, that the rents of the fisheries in the river Tay, near Perth, fell off very much during the time of the stake nets?—When I first came to the Tay, the rents of the upper fisheries were then about 4,000*l.* a year for 15 of the principal fisheries; and during the time of the stake nets in the Tay, 12 of those fishings rented for above 6,000*l.* sterling per annum.

To what parts of the river do you apply that amount of rental?—To the principal fisheries about Perth; I have not included Mr. Richardson's fisheries at Pitfour; he always had them in his own hand at that time, and I never knew his rent.

Above what point in the Tay do all these fisheries lie?—They all lie above the mouth of the Earne, I think, except one or two, and from that to above Perth.

Did you make any offer for any of these fisheries?—We offered 3,000*l.* a year for a lease of the Kinfans fishings, after the stake nets were in use below; but our offer was not accepted; they were let, on that occasion, to Mr. Richardson, for 3,200*l.* per annum; after that time, they were let to Mr. Richardson at 2,100*l.* a year.

In what way do you account for the fishery having been afterwards let for so much smaller a sum?—Because the upper fishers had joined together, and fished them jointly; before that, there was a separation of companies at Perth, but Mr. Bell and Mr. Richardson's people fished their fishings together, as one company, after that, and there was nobody there to oppose them; before that time Mr. Bell and Mr. Richardson were two opposite companies.

Were the fishings, upon the second occasion, let by public auction, or privately?—I think they were let privately; we were always looking after them.

If they had been put up to public auction, should you have been disposed to offer a larger sum than that for which they were let?—I do not know but we would; we would have given upwards of 3,000*l.* a year for them at one time.

What was the ground on which you thought they were worth 3,000*l.* a year?—We could have had many more coble net fishings, and prevented a great many fish passing to the upper fishings; there has been new shots made, and new windlasses put up since that time.

Do you consider, at the time they were let for 2,100*l.* a year, they were, in fact, worth the 3,000*l.*?—I had no opportunity of knowing that; I imagine they were.

Can you state to the Committee what was the total produce of the Tay, meaning, by the Tay, both the river and sea fishings, in the largest sense?—The total produce of the Tay was between 50 and 60,000 at the time when the greatest number of stake nets were up.

Can you state what was the total produce of the same extent of fishings before the stake nets were established?—I cannot, from my own personal observation; I have no opportunity of knowing it; it was before I came to the Tay; but it has generally been stated and believed, even by the upper fishers, to have been about 30,000 fish; at the stations in the estuary, it was very small, indeed, in proportion to what it was afterwards; at sea-side the man was not able to pay his rent at 3*l.* a year, where we killed so many salmon in one stake net.

Can you state what the produce of the same extent of fishery has been since the discontinuance of the stake nets?—I do not believe the Tay has produced, since

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since the discontinuance of the stake nets, more than from 26 to 28 or 29 thousand fish.

Then is the Committee to understand, that there has been a diminution in the produce of the salmon fisheries in the Tay, taking it as a whole, in consequence of the stake nets being removed, of about near 30,000 salmon?—Yes, of fully that quarterly.

Do you consider that it is possible to take as great a number of salmon as were taken during the existence of the stake nets, permanently, without a diminution of the permanent produce of these fisheries?—Yes, there might, with great safety, without the smallest diminution.

In what manner do you account for this?—Because the stake nets take the salmon at that season of the year when they would not go into the rivers; the rivers are not in a state to receive them, they become so heated; the rivers likewise become so very small, and the water gets so hot at that season of the year, when salmon is most plentiful upon the coast of Scotland, that they will not enter the rivers, the rivers being then not in a fit state to receive them; it is by the stake nets that the fish at that season of the year can be taken in the greatest quantities; it is at that time too that they are in the greatest perfection; very few would be taken, except by the stake nets; and if they were not so taken, they would generally be lost altogether; a great part of these fish, that the stake nets do take, are taken going away out to sea; even in the friths and estuaries, the fish do not go far up in the warm months. In the course of my practice in the Tay, I have carefully observed the upper stake nets in comparison with the lower; when the seasons were dry, the upper stake nets took very few fish in comparison at a particular time of the year; in one season, when the season was very dry and warm, the fish in the neap tides did not even approach the highest stake net, namely Sea-side and Birk-hill; when the spring tides became high, the fish came up to these nets, and were taken; but when the tides fell off again, the nets on the lower parts of the frith, on Mr. Dalgleish and Mr. Maule's properties, caught a great deal more fish at that particular time of the tide, when the fish did not float up so high as the upper stake nets. We took the greatest quantity of our fish on their going down to the ocean again, the ebb nets, particularly at that season, taking more than the flood nets very often; the fish seemed to come a short way into the estuary, and go out again; during all this time, the porpoises and seals were seen destroying great quantities of the fish.

Do you think that any of the salmon caught by the stake nets would have gone out to sea, if they had not been taken?—A very great proportion of them, mostly all of them; I had one net between Luchly Carp and the shore, placed solely for the taking of them going out of the Tay, and I have taken in one tide 64 salmon in it, all going down towards St. Andrew's bay.

Do you consider that a great number of salmon, if not taken by such means in the ebb tide, would be conveyed to the sea, and consequently not caught in any of the fisheries?—I do; a great many of them at that particular season of the year would not incline to go up the river, for the reason I have stated before; and as a proof of that, some of the nets had no ebb courts in them, by which means the fish had free liberty at all times to have gone up after approaching the net if they would; but so intent were they on going down, that they remained lying at the back of the net, without any thing to prevent them from going up the river; I may mention, that I have taken in one net at Montorgan, completely constructed for the ebb tide, a great number of salmon and a large sturgeon of about nine or ten feet long; and the net was so constructed, that it could not take a fish, except those going down.

Then is the Committee to understand, that there are salmon which frequent the friths, and go out again without going up the rivers?—There are a great many.

Do you speak of those seasons of the year when the salmon are not going up the river for the purpose of spawning?—I speak of all seasons of the year; I found a number of salmon taken in the estuaries from the commencement of stake net fishing to the end of it; we got them in the ebb tides, in such a way as was to us a clear proof they are always going from the highest part of the estuary to the sea; and I have got them in all the different stations going down the estuary and frith.

Do you mean that they are going down from their own natural impulse, or from

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from being carried down by the tide?—They are going down by their own natural impulse with the tide.

You mean to say that these fish are seeking to get to the sea?—Yes, seeking down to get to the sea.

You have no doubt that such is the fact?—I am certain it is the fact.

Do your statements with regard to the stake net in the frith of Tay, apply also, generally speaking, to the stake net in the other friths?—They do to all the friths that I am acquainted with.

Do you think that by the use of stake nets in the friths, there would be a great number of salmon caught which otherwise might be lost?—A very great many would be caught that would be lost.

Do you think that there are a great many salmon on the sea coast as distinguished from the friths, which are lost unless they are caught by stake nets?—Yes, a great many that would be lost unless the stake nets were to take them.

What is the effect of the stake net on the open sea coast, with reference to the fry?—I never saw fry in one of them. The fry never come near where the sea coast nets are. I visited a number of stake nets the other day, and there was not the appearance of fry of any sort in them.

You mean to state in point of fact, that you believe the salmon fry are never destroyed by the stake nets on the open coast?—I have been among the stake nets on the open coast ever since they were erected there, and at all times of tide, and I never saw the smallest appearance of a salmon fry in any of them, so that I am quite sure they do not destroy any of them. In the stake nets in the Solway, I may have seen one smelt in a season, but that was the utmost I ever saw even in the Solway. Nobody knows salmon fry better than I do.

Do the observations you have made with regard to the fry, apply equally to the Solway?—They do; I have seen one or two in a season in the Newby nets, but no more.

Do you consider that stake nets in the sea are injurious to the young of other fish?—No, I do not think they hurt the young of any fish. I have seen a few garvies, and a few sheddings or podlies in the net when the tide was in, in the friths, but I never saw any of them on the sea coast. I have stood hundreds of times to look what came in, and I never saw any come in.

What is the effect of the stake net fishery in the sea, with reference to the salmon fisheries in the friths and rivers?—I think the stake nets in the sea can only affect the friths and rivers in a small degree. Nobody can take a fish on the sea coast, and say he could not be taken in the frith or river afterwards; but I do not consider that one out of thirty taken in the sea would reach a river, although a much greater number of those taken in the sea might reach the frith, yet they would return to the sea again if they were not destroyed.

Do you mean to say they would not resort to rivers, at the spawning season?—I do say that such as were left would resort to rivers at the spawning season.

Do you in point of fact state, that there is a large quantity of salmon, which, at the season when they are fit to be taken, are only to be taken on the sea coast?—Yes, I do; they visit the inlets and arms of the sea, and go away again in dry seasons; they only come into the mouths and deep parts of these inlets. They are always plentiful in the open sea coast in dry seasons; they do not go into these rivers or even far into the friths, because they are bit at by the porpoises. I have seen the porpoises in the Tay from one side to the other. I remember when I was a boy, we were always sure of a good salmon draught in the stake net, on the days when the porpoises were plentiful.

Should you consider the stake nets on the coast near Montrose, could in any perceptible degree diminish the produce of the fisheries in the Tay?—No, I do not think they could affect the Tay in any perceptible degree.

Are you acquainted with Largo bay, in the county of Fife?—I am.

Should you consider the stake nets established in Largo bay, could affect either the upper or lower fishery in the Tay?—Not in the least.

Do you consider that all the fish which are caught by stake nets placed at the mouth of an estuary or river, are fish which would have gone into that river?—No, they would not have gone into the river.

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Is it your opinion, therefore, that if stake net fisheries did not exist, that a large quantity of salmon must be annually and permanently lost to the public?—There would be a very large quantity absolutely lost to the public.

Is it generally observed, that the fish caught by the stake nets near the coast are chiefly those which are going from the adjacent rivers?—I have seen the fish come directly out of the sea to the sea coast, and leave the coast again for the sea. I have likewise observed a great many of the fish taken upon the coast to be taken going away from the adjacent rivers, but they go in all directions upon the coast.

Do you consider that there are a great number of salmon destroyed by the grampuses, porpoises or seals?—An immense number; far more than all the fishers of Great Britain destroy.

At what time of the year do the grampuses, porpoises or seals appear in the Tay, and how long do they remain?—The seals never leave the Tay, summer nor winter. The porpoises come to the Tay by the first of April and do not leave it again until about the end of August.

Are they to be seen pursuing the salmon?—I have seen them catching them till they were quite satisfied of them, and then they would play themselves with them, by throwing them up into the air and catching them again before they reached the water, as a child would throw a ball and catch it again.

Do they go in crowds?—They go in crowds sometimes, and when they fall in with a shoal of the fish they separate; they go like a pack of hounds, taking all they can, with this difference, they are much more powerful in the effect of taking, and they go in every direction, scouring the frith constantly.

What number of porpoises or seals have you ever observed at one time?—I have observed from 60 to 80 seals in one flock, and I have seen three or four flocks within my view at once at Balmerino.

To the best of your ability, how many porpoises have you ever seen at any time?—I think three or four hundred.

Do the porpoises and seals go up and down with the tide?—They do.

Jovis, 27° die Maij, 1824.

THOMAS FRANCIS KENNEDY, ESQUIRE,

IN THE CHAIR.

Mr. *John Halliday*, again called in; and Examined.

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HAVE you any thing to state in addition to what you stated yesterday, in regard to the destruction of salmon by grampuses?—I have observed the grampuses and porpoises taking the fish while going into the stake nets; I have seen the fish going into the stake nets while the grampuses and porpoises were playing about the outside of the nets seeking for the salmon; I have seen the porpoises very often chase the fish to the shore, I have seen them chase the fish until they leaped on dry ground; I have been at the taking of fish when they have been driven on dry ground in this way; I have assisted in taking a porpoise in the river Annan, above the bridge of Annan, of a very large size indeed, that it took six or eight men to haul him on shore.

Have you ever known porpoises caught by a stake net?—I have taken a number myself; I have taken them above Broughty Castle, in the frith of Tay, and below the castle, in the frith, and in St. Andrew's bay; I have taken some very large ones below the castle, and I have taken a great deal of fish out of them.

Do you know the species of fish in the Tay which is there termed *puffies*?—Yes, I have taken a number of those also.

Are they numerous?—I have seen above twenty pair at once.

Are they destructive of salmon?—I have taken them in stake nets; they are very destructive of herrings. I have seen them chase salmon, but they are not so destructive of salmon as the porpoises are.

Of what size are those animals?—They are about four or five feet long; they are much smaller than the porpoises.

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Have you made any endeavours to destroy the seals or porpoises?—Yes, I have prepared a net for the purpose of catching seals, and have taken above twenty in one stake net in a season; I have taken some of them larger than a horse, very large indeed. I have taken some of them while in the pursuit of the fish by means of a net; I have lain in a boat on the outside of the net, watching their coming in, and I have seen them swim after the salmon into the stake net at full speed, when I pulled up the net which I had prepared for catching them, and then shot them.

Have you made any endeavours to destroy the porpoises?—None, further than by the stake nets; I have sometimes set stake nets so as to take them, but they have always escaped me except those that were taken following the fish.

Then you are not prepared to state to the Committee any plan by which you think these animals might be destroyed?—I have often thought they might be destroyed, but I have never been able to spare so much time as to prepare a proper engine for them. It has been attempted by different people: General Mackenzie, at Broughty ferry, endeavoured last season to destroy them by means of a large net, but the net was so ill constructed that it did not succeed; Messrs. Gray and Grubb, I believe, prepared a net to take them, but it did not succeed, and I have been told the porpoises carried the net away.

You consider that it would be of the utmost importance to the salmon fishery, if means could be devised for the destruction of these animals?—Most unquestionably; it would be of the greatest importance.

Had the stake nets any effect in regard to diminishing the number of grampuses and seals in the Tay?—I think they had; I think they had the effect of diminishing them; they drove them off those situations in which the stake nets were placed: so many men going down at low water and working about the nets drove the seals from the banks they used to frequent; and the porpoises had not such a free scope to range along shore when the stake nets were standing, which, in my opinion, caused them to relinquish those shores a good deal.

Do you think that the number of them have again increased since the removal of the stake nets?—I think they have. I think the porpoises and seals are both considerably more numerous; I have seen the porpoises very frequently ranging the shore where we used to keep the stake nets and taking the fish; I have also seen numbers of the seals lying upon the banks where the stake nets were formerly placed, which they did not do while the stake nets were there.

Can you give the Committee any idea of the number of salmon which may be supposed to be destroyed in the Tay by porpoises and seals in the course of the season?—I cannot give the exact number, but I have often thought that they destroyed four or five times more than all the fishermen in the Tay.

Should you think it likely that a porpoise might destroy, on an average, two salmon each day?—Yes, a great deal more than that; some of them would destroy six or eight salmon in a day; some of them would destroy a great deal more than that, but others of a smaller kind would not destroy so many; but I think on an average they may destroy at least four fish a day.

Seals, it is to be supposed, could not destroy so great a number?—I have, in going down a short space below Broughty Castle, collected twenty-three heads of salmon, which I knew from the appearance had all been eaten by the seals the tide preceding. I have seen one seal take six or eight fish in the course of two hours and a half, while I was watching over one of these nets. I have seen the seals frequently come and break into the nets, taking what fish they could and set all the rest away while I have been lying watching them.

Had you any opportunity to observe what one seal may destroy in a day?—I have known one seal which frequented a stake net at Budden, on Mr. Maule's property, take either ten or twelve salmon and grilses in the course of two tides, and I have known one seal take six or eight fish in the course of two hours and a half, as I have said before; indeed I have often been heard to say that I thought they would take the fishing from us altogether. I was at great trouble to take that seal, and I used many contrivances to get him; I got harpoons made for the purpose, I took a salmon and fastened it upon two large hooks, and then hung the fish with the hooks upon a chain; he came

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and took the salmon, but made his escape. He seemed, however, to have been hurt by the hook. I afterwards was standing on the stake net with one foot on one side of the door and one on the other, watching the seal, when he came and chased a salmon through between my legs, and wheeled about and went away again without my being able to do him any injury.

Did you ever see the stomach of a porpoise opened?—I have.

Did you observe any considerable quantity of salmon in the stomach?—I have seen as much salmon in the stomach of a porpoise as a man could lift.

Have you ever known any instance of salmon being taken from the stomach of grampuses and afterwards sent to market?—I was told by a fisherman in the Solway, he once knew six salmon taken out of the stomach of a grampus, part was much injured and part in a good state, and they sent some of them to Carlisle market.

Does it consist with your knowledge that there are grampuses and seals in other friths and rivers and on the sea coast generally where there are salmon?—I never knew a good salmon fishing which was not attended by the one or the other, and sometimes by both.

Do they frequent the North and South Esks and the adjacent coasts?—They do. We are very much disturbed by the seals there. They come into the North Esk, and take the salmon out of the nets, even after both ends of the nets are on shore.

You are in possession of the fishery of the river Esk at Musselburgh?—Yes.

Have you stake nets in the bay near that river?—I have.

Is that bay pretty much in the open sea?—I consider it as much in the open sea as any part of the east coast of Scotland.

Is there any salmon river besides the Esk near that place?—None of any consequence nearer than the river Forth at Stirling, on the west side; and on the east and south of the Tweed.

Have your stake nets been successful near the Esk?—Pretty successful upon the coast.

State generally what success they have had?—I have got from sixty to seventy fish in a stake net there in one tide; I have had several hundred in the course of the year from that net.

Should you have caught all those fish in the river if you had not used those stake nets?—At the time I caught those fish there was no water in the river for them; there was no more water in the river than what is required to drive the towns-mills at Musselburgh; at least, there was no water in the bed of the river, except what soaked through amongst the stones of the dam dike; and a person could have walked across the river, in many places, without wetting his feet. Indeed, if I had not placed that stake net in the sea, I should have been obliged to give up the fishing, as the river would not have half paid the men's wages.

Then you mean the Committee to understand, that you have caught a considerable quantity of salmon by means of stake nets, in Musselburgh bay, which, unless stake nets had been used, must have been lost to the public?—There must have been a great many that would have been lost.

Is the Esk a very small river?—It is a very small river.

If a flood had occurred, would those salmon have gone up the river?—No; they could not have got up, even if they had been inclined to go. There is a dam dike erected a little above the bridge, and whenever the fish get up to that dike, they cannot get up any further, the dike is erected of such a height, with a frame work put on the top of it. I have seen the salmon attempt it many times without success, and turned down again to the sea; in a very large speat some may get over it, but very few.

What do you consider to be the greatest number of fish you could take in the Esk and the adjacent bay, if you were not allowed to use stake nets?—I do not think that I could take above fifty or sixty fish in the course of a season, without stake nets.

Then is the Committee to understand that you would lose so great a number of fish yearly, if you were not allowed to use the stake nets?—I would lose a great number yearly.

To what extent?—Four or five hundred.

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What would become of those fish?—I should suppose they would go out to sea; I cannot say positively what would become of them. It is very likely that they would be destroyed by porpoises or some of those animals I have seen destroying them so much.

Have you any knowledge of the stake nets in the Frith of Forth?—I have.

State what you know of them?—At a place called Hound Point, near the Earl of Rosebery's house in Dulmany Park, I erected a stake net for his lordship. There had been no fish taken before I went there; and after the stake net was completed, we continued to take a good many fish. I think the first tide after it was put up, we had about twenty-eight or twenty-nine salmon and grilses in it.

Have you any knowledge whether considerable numbers of fish continue to be taken by that net?—Yes, I know that they do. I recommended two servants to his lordship, to superintend the net, and take care of it; two old servants of mine; and they have told me, that they have got a good many every year. They have always been there ever since the net was erected, which I think is eight or nine years ago.

Was there any fishery at that spot previously?—No.

Could the same quantity of fish have been procured by any other means than stake nets?—By no other means than stake nets, that I know of.

Did you see any grampuses or seals near the bank on which the net was placed?—Yes, a good many; the net took a very large seal before it was altogether completed; nearly a load for a cart.

Did the seals generally come towards the net?—They did; they remained about the net, and the men were obliged to watch them at high water.

Was it in pursuit of the salmon they came towards the net?—It was.

Is that net still in the Frith?—It is.

How does it happen, that stake nets are allowed in the Frith of Forth, when they are not allowed in the Frith of Tay, or other friths?—I cannot say; I have often wondered why they were.

What other stake nets are there in the Frith of Forth?—There is one at Hopetown House, and between Hopetown House and Queensferry; there was one at Inverkeithing bay, on the opposite side; I do not know of any other; I believe there was one at Largo bay.

Have you any knowledge as to whether the stake nets at Hopetown House, at Inverkeithing bay, at Hound Point and at Largo, take considerable quantities of fish?—I know that the one at Hopetown House, the one at Hound Point, and the one at Musselburgh, take a good many fish; I am not so well acquainted with those at Inverkeithing bay and Largo bay.

Is the net at Hopetown House in a situation where the fish can be taken by other means?—Part of them could be taken there by other means, but nothing like the same quantity.

Can you state the quantity taken at Hopetown House, or Inverkeithing bay, or Hound Point?—I should suppose that they must take about 400 salmon and grilses a year at Hound Point.

At Hopetown House?—I do not know exactly what they take at Hopetown House.

Have you ever examined the coast to the south of the Forth?—I have.

How far to the south of the Forth?—I have examined it as far as the Coquet Island.

Have you found on that extent of coast any stations which could be advantageously used for stake nets?—I have; I have seen some very fine shores there that could be used for stake nets. So late as the year before last, I went to Alnwick for the purpose of waiting upon the factor of his Grace the Duke of Northumberland for the purpose of taking those shores, when I was told by the factor that they were let on lease. On a former occasion I visited the river Coquet along with a Mr. Richardson of Berwick-upon-Tweed, for the purpose of taking that river, having heard that it was a very excellent salmon fishery; but when we went to the river, we found there had been a tin mill recently erected, and after the tin mill was set a going, they never caught either salmon, grilse or sea trout, although they still continue to get a great many of another kind of trout in the river.

Do you consider that the Duke of Northumberland's coast is peculiarly fitted for stake nets?—I do; I think there are some very good stations upon it.

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Do you consider that large quantities of salmon frequent that coast?—I have no doubt of it; I have seen them frequently leaping upon it when I examined it; I have seen them leaping at the Coquet Island, and the shore below the river Coquet; and I have seen them all along by the mouth of the river Alnwick.

What extent of coast do you think is suitable to stake nets there?—There are a great many miles, I do not know the exact extent of it; I should suppose there are at least eight or ten miles of that coast very suitable for stake nets.

Then do you consider, that if stake nets were properly placed, that a valuable fishery might be established?—I am certain of it.

Have you made any offer for those fisheries?—I applied to his Grace's factor, but I was told they were on lease; and therefore I did not inquire any further about them.

Do you consider that the fishery which you think might be established there by means of stake nets, could be equally advantageously carried on upon any other plan?—No, I do not think it could upon that shore; there is at present a fishery carried on without stake nets at the mouth of the Alnwick; but if stake nets were used, the produce might be greatly increased; I am quite sure of this.

Are there any other suitable stations to the northward, between the Duke of Northumberland's coast and the Forth?—Yes; there are a good many.

State the points generally?—All round Holy Island is very well suited for catching salmon; I have repeatedly gone to Holy Island, and resided there at different times for days together, for the purpose of examining that shore, with a view to taking the fisheries. My former partners and I engaged for some leases there about twenty years ago; but owing to other fisheries that we had in hand, we found we had plenty without them, and therefore we relinquished them without trial at that time; but I have since gone and looked at them with a view of taking them on my own account. And two or three years ago, at the same time that I was at Alnwick waiting on the Duke of Northumberland's factor, I also went to Wooler, I think it was to Lord Tankerville's factor, offering to take the coast opposite to Holy Island for the purpose of establishing a salmon fishery; the factor was to communicate with his lordship, but I got as many fisheries as I wished at other places and did not inquire farther; at the same time I made inquiries regarding Holy Island, but did not meet with the proprietor.

Are there any stations near the Tweed where stake net fisheries could be advantageously placed?—Yes, there are; all along Berwick bay they would answer very well.

Do you consider that stake nets might be generally established there, without diminishing the fisheries in the Tweed?—I think it would greatly increase the salmon fishery from the district generally.

Do you think that such increase might be made without a decrease of the fisheries in the river?—I do think it might with a very small decrease; there might be some of the fish taken that would go up the Tweed; but the Tweed fishers say, that very often salmon come to the mouth of the Tweed, and leave it again without their being able to take them.

At what season do you consider that the stake net fisheries near the Tweed would have that exclusive advantage?—I think, that in the months of May, June and July, they would succeed the best, and produce the greatest quantity.

Do you consider, speaking generally of the coast between the Forth and the Coquet, that a great quantity of salmon frequent it?—I am sure of it. I have stopped oftener than once at a little village (Burnmouth, I think it is) to examine the coast, and seen them leaping along the whole of that coast, where they might be taken when they would not go into any river. I have seen them fishing in the Alnwick; and when they have got none in the Alnwick, I have seen evidence of there being a great quantity of salmon on the coast.

You stated your opinion, in regard to the fishery established in Musselburgh bay, that a great quantity of salmon were there taken by stake nets which could not be taken by any other means, owing to the smallness of the river; do you mean to apply the same observations to those small rivers on the coast of Northumberland?—I do; and I think a great deal more salmon would be taken in proportion upon the coast of Northumberland than is taken in Musselburgh bay. I think a great deal more salmon visit the coast, owing to the set of the tide.

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Do you consider that the salmon, in that more exposed coast, are of fine quality?—I think they are; my salmon, taken at Musselburgh, is remarkably good. It is sold in the neighbourhood chiefly, and at prices above the Edinburgh market considerably; I generally get a penny or two-pence a pound more than they get in the Edinburgh market.

You consider, on the whole, that great improvements might be made in the salmon fishery on the coast between the Forth and the Coquet?—I am very sure of it.

Have you extended your observations to the south of the Coquet?—I have not.

Are there any stations between Dunbar and Berwick-upon-Tweed suitable to stake nets?—There are two or three places there that would answer well for stake nets. There is one station at Burnmouth, and there are others between it and Berwick-upon-Tweed that would answer very well; and there is another on the west side of a point of land as you come to Dunbar; it is just to the eastward of a little fishing town.

Is the point you mean St. Abb's Head?—It is. The station I mean is on the west side of St. Abb's Head; they would do better there than at Musselburgh.

Are there any stations suited to stake nets between Dunbar and North Berwick?—I think there is a situation pretty near to Dunbar, but I did not examine the rest of that part of the coast so particularly; I did not examine the shores at low water on this coast any further than Dunbar.

What do you consider to be the effect of stake nets, with regard to the navigation of friths; are they injurious, or useful?—I think they are very useful. At the time that I had the greatest number of stake nets in the Tay, I lived on board of a small vessel, along with my men, and I had occasion to go up and down the frith in this vessel very often, and I should often have got a-ground if I had not had the stake nets, as beacons, to conduct me along the frith clear of the banks.

Are they sometimes to be seen at a considerable distance, and so serve as a guide to vessels?—Yes, you can see a stake net at many miles distance.

During the night can you see them at all?—If the night is very dark, you cannot see the nets, or any thing; but if it is at all clear, you can see the nets. There is, generally, a reflection on the water, so that you can see a black thing much better than a white thing in the water during the night. I have many times looked for the nets in the night when I have been going up and down the frith, and been guided by them.

Have you ever known vessels to be injured by the stake nets?—No; I never knew of any.

Do you speak, in these observations, with regard to the Solway and Murray frith, and the Tay, or to what friths?—I speak principally of the Solway frith, and the Tay and the Forth; I have had no experience as to the Murray frith.

Do you think that vessels more frequently run upon banks in the Tay now, than during the time the stake nets were there?—I am very sure they do. I see from my windows right up the Tay; I see vessels get a-ground on the banks upon which the stake nets used to be placed.

Do you consider that there is any difference in the quality of the salmon taken in the different parts of the same river, or in the estuaries, or in the sea?—I think the salmon taken in the sea are by far the richest and the best fish; there is not so great a difference between those that are taken in the sea and the estuary, as there is between them and those that are taken in the river.

Do the salmon cease to be in a sound and good state when they have been for some time in fresh water?—Yes. The salmon becomes unsound after it has been detained in fresh water at any season; it becomes unfit for food after it has been any length of time in fresh water during the warm weather in summer.

In general, therefore, you consider that fish that are taken from the sea, or have recently left it, are in the best state?—I do consider them in the best state when they come immediately out of the sea.

In what should you state that the difference of quality consisted?—It consists in the fish being both weightier and fatter, and in firmer condition, and also in being taken in a situation where it is not injured by being taken.

Are there any circumstances connected with the modes of fishing, which affect the quality of the fish?—Yes, there are.

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Will you state them?—The circumstances that affect the quality of the fish in the modes of fishing, are chiefly these: In the coble net fishings, they are hauled on shore over the banks or beach; the scales are ruffled, and the fish are injured very much by their violent exertions in the net, and knocking themselves against the ground; after they are hauled on shore, and are tossing and tumbling on the beach, the fisherman, in order to kill them, strikes at them with a stick for the purpose of killing them, and often not hitting them on the right part of the head, but striking them on the back, it spoils the fish very much; the back is sometimes to be seen bloodshot; very often the fish is much injured by these causes. There is another cause of injury in the coble net mode of fishing; the fish, after being taken and killed in the way I have described, are put into the coble or laid upon the side of the bank, where they remain a long time in the sun; they cannot be taken singly to an ice house fresh from the water; the general practice in the Tay, below Perth in the river, is for a boat to collect them from the various fisheries, after they may have lain about 12 hours. The boat comes up with the tide, reaching Perth about high water, and collects the fish at each station as it comes up, and delivers them at Perth; many of those fish are taken immediately after the gathering boat has passed, and must remain till the boat comes up again before high water next tide; the salmon from above Perth are brought down by land carriage chiefly, often in sacks over the backs of men or horses.

Do the salmon get into the stake net without injury?—They do.

Can they be taken out at any time of the tide?—They cannot all be taken out at any time of the tide, although part may be taken out even at high water; but if you take out part, it frightens the others, and they go down to the bottom of the net; but they can all be taken out at a particular time of the tide, that is before the tide leaves the stake net; and the proper way is, to take them all out at once near low water, before the water leaves the net.

When taken out, in what way is that done?—They are generally taken with a small hand net; the fisherman can take up one or two at a time, as he pleases, in this net; after he takes them up, he puts one of his hands round the head of the salmon, confining the body of the fish by the net, and with the other hand knocks him on the head; if he misses the fish in striking him, he hits his own hand; the fish are immediately put into a cart or a boat, and carried off to the ice house; the cart or boat generally attends at the back of the net, waiting till the men take out the fish.

In how short a time are the fish so taken generally put in a state of security in an ice house?—It depends much upon the distance that they are from the ice house; my fishings were at one time below Broughty, and in the course of half an hour or an hour from the time of their being taken, they were put in the ice house.

Is the Committee to understand, that fish are generally taken alive in the stake nets?—Yes, they are generally taken alive in the stake nets, unless when the men neglect their duty, and allow them to go dry by the tide going out of the courts next the shore; if they sleep too long, this may happen.

If the fishermen do their duty, the salmon ought always to be taken alive in the nets?—Yes, they ought always to be taken alive; it is our rule, that the men should go down and take them alive every tide; but in some nets there are pools formed, in which the fish may swim alive, even after the tide has left the net; and although the fish were to remain for a day in that pool, they would not be any worse; it is the lying dead or exposed to the sun and air that injures them.

Are the salmon ever injured in the stake nets, by striking against the stakes?—I have seen some of them a little injured upon the sea coast, with a very heavy gale of wind, when there was a great deal of surf upon the coast, but not in general; it is only when the nets are broken and destroyed this happens.

If stake nets were established as generally in your opinion as they might be with advantage, would they furnish considerable employment to the population of the adjoining country?—They would give a great deal of employment to different classes of people.

Can you state the actual number of persons which you have ever employed in fisheries managed by you?—I have just now about 200; I have had in a very short space of coast to the eastward of Broughty Castle, above 100 people employed at one time.

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For a considerable portion of the year?—For the greatest part of the fishing season, from about the month of December till after August, and I have kept a great many of them over the whole season.

Do you employ women and children as well as men?—I always do employ a number of women and children, for the purpose of working the nets; I employ a number of ropers, hecklers, twine-spinners and men in boats; I also occasionally employ shipping for the stake nets, bringing home the hemp, and conveying the salmon to the London market.

Is the Committee to understand, that a greater number of persons would be employed, if stake nets were generally established, than can be employed by means of coble and other modes of fishing?—A very great number more people would be employed by the use of stake nets, than by any other modes of fishing.

Does this lead to the conclusion, that the stake net mode of fishing must be more profitable than any other, in order to enable you to employ a greater number of persons?—It is a great deal more profitable on the shores of estuaries and friths, and on the open sea coast; once on the shore to the east of Broughty Castle, I took 199 boxes of salmon in two days and a half.

Do the stake net fishermen become expert sailors?—They do; a great number of my fishermen have gone into the sea service; there are several of them on the ferries; some of them are engaged in smacks, and some of them have gone on board of the navy.

Do you mean, that they become more expert seamen than persons employed in the coble net fisheries?—A great deal more; the coble net fishermen are never accustomed to any thing but a coble, but the stake net fishermen are accustomed to boats of different descriptions; and some of my fishermen became so expert with their boats, that they out-manœuvered some of the cutters that came to impress them; and though they fired through their sails, yet they outsailed them, and got away.

State what you would recommend as to the commencement and ending of the fishery, with a view to obtaining the greatest permanent supply of salmon, and preserving most effectually the breed?—I think the rivers ought not to open before the end of March, or the beginning of April; and I think none of the fishings should be continued longer than about the tenth of September. That is about as late as they ought to fish. The fish is good till that time, and although the spawn is pretty much advanced then, yet there are plenty of fish left to breed for the supply of all the fishings, even after the 15th of September, if the close time were enforced. There would be about eighteen thousand salmon which come to the London market after that period, on an average of the three last years, added to the old breeders.

Do you mean from the Tay?—No, I mean from all Scotland. That quantity arrives in ice after the 15th September, besides what is kitted and sold at the different stations; and allowing that those fish were added to the general stock of breeders, they would, in the course of one season, upon the average of twelve thousand to each pair, which is making a very great allowance for what might not come to perfection, increase the quantity in one year of salmon and grilse, about one hundred and eight or ten million.

Do you consider it likely that those eighteen thousand salmon should produce on an average each twelve thousand young fish?—I think they would; it is just about two-thirds of what they contain on an average. I am allowing one third to be destroyed in one way or another.

Do you consider that the same period for commencing and ending the fisheries, would be applicable to all rivers and estuaries, and the sea coast of Scotland?—I think the same period ought to be in all rivers. Although new fish or clean fish are to be found in some rivers earlier than in others, yet they could not take those clean fish without an immense injury to the breeding fish, if they commenced earlier than the time I have proposed.

In what way do you think that the proprietors of upper fisheries can have such an interest in the taking of salmon in these parts of the river, as to induce them for their own sakes to protect the breeding fish, the spawn, and the fry, while in the upper parts of the river?—It would be very difficult for me to say what could be done to add to their interest; I should suppose the additional quantity of new or clean salmon they would get in the spring, when the river opened, if the close time were altered, would be no small inducement.

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No such thing as there being in one day in the week no fishing below, would be of any use. They must take their chance. If more fish were bred, more would get up during the times of the river floods. Since the lands have been so much drained, the rivers fall in so fast, that fish cannot get up to the higher parts of rivers so freely as formerly; and every new dam dike that has been thrown across the different rivers, is so much a new and greater impediment than there formerly was, on account of the new methods of constructing those dikes. In my opinion, what would add in the greatest degree to the value of the upper fisheries, besides the proper regulation of the close time, which, if it were prolonged, would allow the higher fishery to become stocked with fish new from the sea in the spring, would be to cause a break or opening to be kept in all the dam dikes, and so allow the fish to ascend more regularly than they do at present.

Do you mean that in consequence of the draining of the lands, the river is for a greater part of the year than formerly in a low state?—I do.

If the commencement of the fishery was delayed until a later period in the year than is now in use, would the sound fish be distributed over all the fisheries of the river, so that the upper fisheries might have a reasonable share of the sound fish, during the fishing season?—The upper fisheries by beginning later, would have a much larger share at the first of the season when the fishery opened, of the clean fish that would then be in the river; but I do not see any other mode by which the upper fisheries can get a larger share in the rest of the season than they had formerly, unless by the proper regulation of the mill dam dikes, as the lower fisheries in the rivers are always curtailing the upper fisheries, by increasing their fisheries below, by additional works and coble nets in the channel of the river. There are a great many new works and nets upon almost all the fresh water fisheries. I know there is a new fishing established in the channel of the Dee, about three or four years ago, which took, at least, from thirty to forty barrels of salmon annually.

Would it be injurious to the lower fisheries, that the close time should continue so long as to give a fair supply of fish in the beginning of the season to the upper fisheries?—No, I do not think it would.

If the close time was not to cease until the first of April, do you consider that the upper fisheries would, by that means, obtain a fair and reasonable proportion of sound fish?—I think that the fisheries above would increase greatly in value by beginning at that time, instead of allowing the whole river to open as it does at present.

Do you mean to say, that the commencement of the fishery taking place on the 1st of April, would on the whole, be for the interest of the fisheries in the river?—It would, in my opinion, be for the general interest of the river to begin at that time.

You would, therefore, recommend that the fishery in the Tay and other rivers in which you are interested, and with which you are acquainted, should not commence till the 1st of April?—I think it should not commence till the 1st of April, and I think it would be a time that would answer all generally.

Do you consider that the close time ought, also, to be in the Tay, at the same time of the year?—I think it should.

What would be the effect upon the whole, of this proposed change of the close time, with regard to the upper fisheries; would they be generally improved, or would they generally decrease?—They would be improved very greatly, for the upper fishings would get the spring fish at the opening of the river, and the lower fisheries would increase in the summer fish; the upper fisheries, particularly, would be considerably increased; I know some of them for which I would, under such an arrangement, give double rent.

Upon the whole, would the upper fishings generally increase?—All the fishings that I know would greatly increase.

There would be more fish, upon the whole, caught in the short fishing season that would then remain, than there would be in the present long fishing season?—A great many more.

Do you consider that any individual fisheries, in any river with which you are acquainted, would suffer in value from that alteration of the close time?—No, I do not think any would suffer materially in value, for what they would want in price they would make up in number; I think the fisheries would all retain their value, and increase.

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Do you think, that by giving to upper proprietors of fisheries a greater interest in the fishery, that they would thereby be induced to protect the breeding fish the spawn and the fry?—I have no doubt but they might, but they have not shown any symptoms of it of late.

Do you consider that there is any other way of securing the protection of the breeding fish, the spawn and fry, than by giving to the upper proprietors a fair chance of taking fish during the proper season?—Yes, I think there are many ways by which the fish could be properly taken care of without giving any other interest than at present.

Do you not think it desirable to give to upper proprietors a fair interest in the fishery within their own property?—I certainly do.

Be so good as state the other means which you would recommend for the protection of the fish in the upper parts of the river?—The most effectual means that I know would be, to appoint people to superintend the rivers in close time, and take care of the spawning fish.

Does it consist with your knowledge, that fish which have not spawned are caught in January?—Yes, it does.

Does it consist with your knowledge, that great numbers of newly spawned fish are caught in February and March?—Immense numbers; I caught great numbers on the second and third of February of this year myself (I could not avoid it), in getting the river fished, and when they begin sooner it must always be worse. In the upper parts of the river Tay there must be thousands taken annually.

Then you are decidedly of opinion, that the close time ought to extend to the end of March?—Yes, I think it should extend to the end of March or the beginning of April.

Do you think that all the fry would be come to life by the time you propose that the close time should cease?—I think the greatest part of them; at any rate they would be all alive on the 6th or 8th of April, but I have seen great numbers of them in life in March.

Do you not consider that the time you have proposed for ending the fishery is too late in the year, the 10th of September?—No; I think fishing to the 10th of September would leave a sufficient supply of breeding fish; if they were taken care of, there would be plenty of breeding fish left after the 10th of September.

Can you state any reason on which you form the opinion that there would be abundance of breeding fish left after the 10th of September?—There must be an immense number of fish enter the river after that time, for I have seen them swimming in the channels of the rivers in great abundance, both in Scotland and in Ireland, after the 10th September. The average quantity that has come in ice, from all Scotland, to the London market for the last three years, is about 184,000 salmon yearly, which would only require 15 or 16 pair of salmon to furnish, and what becomes of all that is bred remains to be ascertained.

Do you wish the Committee to understand, that although there is abundance of fish which enter the river after that time, yet that they are generally so far advanced towards spawning, that they are, in fact, not fit to be taken?—I think a large proportion of them are very fit to be taken till about the 10th of September, although some of them are much farther advanced towards spawning than others, and not fit to be taken.

Do you wish the Committee to understand, that after that time they are generally in a state in which they ought not to be taken?—I think they do become, immediately after that time, unfit for use; last year, some of the fish sent from Montrose before the 10th of October were seized, and condemned in the London market, as being unfit for use; and I have seen them frequently take them, by the 1st of October, that I considered were very unwholesome and very improper fish to be taken.

In that calculation you have made of the number of breeding fish that are sent from Scotland to the London market after the middle of September, what proportion of them are taken by stake nets?—I cannot answer that question; there are a small proportion of the fish taken by stake nets at that season of the year. The stake net fishing generally falls off as the spawning season approaches, and all the accounts that have been kept at any of the nets that I have seen, have generally fallen off towards that season of the year, they do not

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not take near the number of fish that they do in the other months of the year; the salmon seem more inclined to draw into the channels of the rivers.

There is some proportion of them taken by stake nets?—There are a very few; when we had a fishing at Sea side, I recollect from the 10th of August till the 26th, that during that time there was only very few fish taken; I think we had only one fish one tide and one or two at another, but previously we had fish every tide all the season over.

Can you tell what proportion of these fish, that you describe as sent after the middle of September to the London market, would probably have entered the river if they had not been caught?—I have no doubt that the greater part of those fish were actually in the rivers at the time they were taken; only a small part, if not destroyed by the porpoises, &c. would be stake net fish. I have no notion of what proportion of those fish which were taken in the stake nets would have entered the river, but I should suppose that at that season of the year, the greater part of them might have entered the river.

The stake nets in practice have caught but a little after the middle of August?—They catch a few fish after the middle of August; they do not catch the same quantity in proportion that they do in the most unfavourable of the summer months.

In September they catch almost nothing in the stake nets?—They fall very much off at that season of the year.

You have stated that you caught a number of foul fish in February and March this year, where did you catch them?—In the North Esk. I caught them upon the spawning beds in the night time. I let them away there in the day, but when the night came on I could not let them away, lest I had sent away clean fish instead of foul, and it is the first year since ever I sent fish to the London market that I had any of them seized, and if the Committee please, I will give them my factor's letter returning the account of them. I never lost any fish in the London market before this year, and those were the fish that I took in the North Esk in February last.

In what way were they caught?—By net and coble.

Is it usual to fish in the night time?—Always at that season of the year. At the first of the opening of the rivers they generally begin the night before; in the evening of the night before the rivers open.

Are there any regulations or practices in the rivers or estuaries with which you are acquainted, entered into by the fishermen, independently of what you believe to be the law?—They sometimes fish two or three weeks longer at Perth, by agreeing amongst themselves to do so.

At what time does the fishery open in the Tay generally?—On the 10th of December, or rather on the night before; they generally begin in the evening of the night before the river opens. I have known them in some parts of the Tay fish before that time.

From what you have before said, you think it is extremely injurious to the general produce of the Tay, that the fishery should exist between the 10th of December and the 1st of April?—I am quite certain it is very injurious to the Tay.

When does it close in the Tay?—On the 26th of August, unless when an agreement is made among the fishers to continue longer.

In the upper parts of the Tay, and the rivers that run into the Tay, is it not perfectly notorious, that they pay no attention to the close time?—It is so much so, that when the people from the upper parts of the Tay come down for the purpose of sea bathing at Broughty Ferry, they discourse upon that subject freely, and say, that their young men sometimes go out in the evening, and bring home as many before bed-time as they can carry.

You stated yesterday, that if cruives were well regulated, they would not be injurious to what you call the mother fish?—I do.

What regulations do you mean?—A dike so constructed as to conduct them down the deepest part of the river, in dry seasons, opening at the foot of it.

Is it a common error in the construction of cruive dikes, that the slope or break in the dike runs dry?—In many places it does; the fish in dry seasons are all kept up and destroyed; it is by the cruive and dam dikes, as they are now constructed, that many of the fish is prevented from getting down to the sea, and this enables the country to take them there.

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(May 27.)

What you are now saying, relates to the kelts or fish after they have bred?—And the smelts likewise.

Is it not of much more consequence to preserve the breeding fish when going up to spawn, than to preserve the kelts after they have spawned, and are descending the river?—It is of the greatest consequence to protect them both; I consider that the kelts may be the very mother fish, some of which may return to stock the river in the end of the season again.

Is there not much more chance of the breeding fish, full of spawn, being of service in the propagation of the breed, than that the foul fish after it has spawned shall come down the river and be saved through the whole fishings of the next year, and come up again?—There is certainly much more chance of the breeding fish being of service.

Then it is of much more consequence to preserve the fish full of spawn when going up to breed, than to preserve the foul fish after having spawned?—Most undoubtedly.

Do you conceive the cruive dikes to be injurious to the fish going up to spawn?—I consider them not the least injurious if the cruives are not in.

But when the cruives are in, you conceive them injurious?—I consider that in close time they ought always to be taken out.

The fish ascend to breed in the fishing time, as well as in the close time?—Yes, they do towards the end of August, if they are not taken on their way up.

Then at the time that the fish are ascending to breed, are the cruives or not injurious to the fish?—They are when the cruives are in to the extent of taking fish; but any other mode practised in the upper parts of the rivers are equally injurious in proportion to what they take; I do not understand that they are in the least injurious to salmon out of the season, as the cruives ought all to be taken out on the day the river closes, and not allowed to be put in again until the river opens.

You stated yesterday, that the coble nets destroyed the mother or breeding fish, but that the cruives did not destroy the mother or breeding fish if they were well regulated; is there any thing in the construction of cruives, well regulated, that makes them less apt to catch the mother or the breeding fish, than any other sort of fish?—Yes, there is.

What is it?—By taking out the cruives at the time the river closes, they are permanent and fixed, they do not come over the spawning beds.

The question does not refer to the spawning beds, but to the mother or breeding fish?—I am not aware of any.

Do they not prevent the mother fish from running up?—They do as long as they are in the water.

Have you ever heard of a Saturday's slap?—I have heard of it.

What is a Saturday's slap?—I am not very well able to describe it.

Veneris, 28° die Maij, 1824.

THOMAS FRANCIS KENNEDY, ESQUIRE,

IN THE CHAIR.

Mr. *John Halliday*, again called in; and Examined.

Mr. John Halliday.

(May 28.)

YOU are well acquainted with the fisheries upon the Solway, and also in the river Annan; will you state what effect you believe the stake nets upon the Newby fishery has upon the general supply of salmon?—I think the stake nets have increased the general supply of salmon from that quarter since the improvement of the stake nets in taking the fish, both in going up by the flood tide, as well as going down the frith by the ebb tide. The Newby fishery is also practised by a mode of fishing called half-net fishing, which I have used many years myself both in those fishings in the Solway, and in the foot of the river Annan, which mode of fishing is more successful in taking fish going down the river into the sea, than it is in taking them going up; and also in the frith in going down by the ebb tide.

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Is the fishing by stake nets more effectual in the catching of fish than that you have described by halving?—They are a great deal more effectual, as they reach further into the sea than half nets do; the half net is only about twelve or fourteen feet long, and I have often seen the fish go down by the end of the half net, when a stake net could have taken then.

Is it consistent with your knowledge, or can you state a confident opinion, whether the fishing by stake nets upon the Newby fishery interferes with the fishings in the river, as to the quantity of fish to be found in the river?—No, I do not think they do; at the time the stake nets at the Newby fisheries are most successful, the river Annan is at that time so very small, that the fish in general would not enter it, and most of them are taken in the stake nets, by the ebb tide, going down the frith away from the river.

Are you acquainted with the present state and formation of the stake nets upon the Newby fishery?—I am; I have been frequently upon the fisheries, and have examined the whole of them.

From their construction, can you state whether they are susceptible of interrupting the progress of the fry from the river to the sea?—I am sure they are not susceptible of interrupting the progress of the fry to the sea.

Are you acquainted with the local situation of the river Annan, from its mouth to its source?—Yes, I am.

Be pleased to state to the Committee, whether you are acquainted with any impediments to the general prosperity of the fishing upon the river?—Yes; I am acquainted with some of them.

Be pleased to state them?—I observed a new manufactory established some years ago on General Dirom's property, also a new dam-dike across that part of the river, where there are some new mills established, which I consider a very great destruction to the General's own fishery.

Does that interfere with the general prosperity?—I think it is a very great destruction to the river in general, and to the whole fish in the river, above and below; there is another new dam-dike across the river, a little lower down than the general's property, upon the property belonging to Mr. Irving of Newby, which I see has been newly rebuilt, much higher than the old one, upon a more improved principle, for taking all the water out of the bed of the river into the mill-dam, which must be very destructive to the whole fishery in the river, as it must impede the spawning fish in going up the river, and also the fry and parent fish in returning to the sea.

Is there any mode which you could suggest to the Committee, by which these impediments to the progress of the fish to the sea could be remedied?—I have formerly stated, by opening a proper sluice, or call slop, at the proper place where the mill-dam became narrow, and placing a heck across the head of the dam, below the call slop, to prevent the fish going down the dam in returning to the sea; and the call slop ought to be so constructed, as to allow the parent fish to pass easily up and down the river.

Do you consider, that the injury of a dam-dike to the fish may be completely or nearly obviated by the slop which you propose?—I think it may, if it be properly regulated.

Are you not aware, that the dam-dike to which you have alluded, stretching from the other side of the river, is entirely a new construction?—There was an old one, upon the same site, which went across formerly; it was loose coble stones, and was no obstruction to the fish. This one appeared to me to be built in ashler much stronger, and much firmer and higher than the old one; but there was not any old dam-dike where the general has built his.

Then are you confidently of opinion, that these dam-dikes are so injurious to the fisheries upon the river that they ought to be removed?—I think the fisheries could be perfectly provided for without the necessity of removing the dam-dikes.

Be pleased to state the mode?—By allowing a sufficient slop to be opened from the closing or setting of the mill, or from sunset to sunrise; the fish run most in the morning and evening in the river. If this were done, it could be no impediment to the fish to get up; for the fish do not run up through the day so much, unless the river is flooded. I also see a difference in the pool I was formerly examined about, near where I used to take so many fish coming down from the upper waters, the Sand pool in the Annan. The water, when I used to fish it, went out of the foot of the pool, in three streams; but now it is conducted all into one channel; and the fish, in coming down the river, get immediately

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immediately out of the foot of the pool, and they do not turn up into it, as they formerly did; for they go directly down the river, as they find their way much easier than when the water was divided into three parts at the foot of the pool. Besides, I am satisfied that the new dam-dike built by General Dirom must stop the fish from falling down into the pool out of the Brid Kirk, Luss and Hoddam waters, where we formerly supposed they came down from, when the water was rising.

Are you acquainted with the extent of the Newby fisheries upon the river Annan?—Yes, I am.

State it?—They ascend up the river, from the junction of the river Annan in the Solway frith, up to the Pillar of Warmby, which is the march between John Irving, Esq. of Newby, and Messrs. Pool.

Supposing that there were no stake nets upon the Newby fishings, and taking into view the extent of the property upon the river; what effect do you believe it would produce upon the fall of the fishery?—It would make a very great fall upon the value of those fishings; I think to the extent of five-sixths of their whole value. I know many rivers where no stake nets have been erected at all, and the fisheries have been quite neglected in those rivers; new erections have been made upon them, so that the salmon fishing has been quite destroyed. [Here the witness requested to add to his answer of yesterday, that, although he was not a tacksman of cruive fishing in Scotland, he had been a partner in the cruive fishing in Ireland, and that he did not consider the cruive fishing at all injured the salmon. The witness stated, that the breeding fish entered the river Tay by the mid stream, or deep water, avoiding the shores, where stake nets are placed.]

Does the witness mean to state that salmon taken during July or August in the stake nets, did not contain either roe or melt?—They did; they contained both roe and melt.

You have stated that you have seen a quantity of spawn destroyed by coble net at one particular place, have you observed that in any other situation?—Yes, I have in different stations on the North Esk this year.

You stated, there are marks by which salmon, or full grown grilses, can be known; will you state, whether you can distinguish between the young and the old salmon?—I do not see much difference between the young and old salmon in their shapes. The tail of the young salmon is not forked like the tail of the young grilse; it is more spread, and full in the centre. The grilse's tail is much more forked, like a swallow's tail; and the head of the grilse is much smaller than the head of a young salmon in proportion to the size of the fish.

I wish to know from you, whether you know any particular marks between the young and old salmon?—I know no particular marks between the young and old salmon further than the growth of them.

Are you of opinion that the salmon return to the rivers in which they were bred?—I cannot say that they do all return to the rivers in which they were bred. I think we do not see them again from the time they leave the river as fry, until the next year, early in the spring, when they begin to return to the rivers young salmon.

In the next year do you suppose they come to the same river?—I could not say, they have been so long out of sight. I found the different rivers vary from one year to another; but when one is protected and another unprotected, the unprotected river keeps up its quantity as well as the protected one. My own opinion is, they do not all come to the same river in which they were bred. I have no particular cause of knowledge but my own remarks. I know rivers in Ireland with cruives at the head of the tide where they fish all the year round, and other rivers that are protected; yet that which is fished all the year, gives its usual proportion, and it is only from these remarks, that I judge. I cannot make out the distinction of one river's fish from that of another, when the fish is equally well grown.

You cannot distinguish between the fish caught in one river and those caught in another?—Not if they are exactly the same size and make and taken at the mouth of the river.

You cannot distinguish one taken in the Tweed from one taken in the Tay?—I could not, providing, for example, a fish of the same size and growth taken at the mouth of the Tay, and another at the mouth of the Dee and Don or Tweed,

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Tweed, and allow me to select them. I do not believe there is one person in London could distinguish the difference. I have compared them in Ireland, England and Scotland, many times.

You have stated, that you have seen a number of porpoises and seals in pursuit and killing the salmon?—Yes, I have, more than a thousand times.

Have you ever seen those animals killing other fish?—No, I never did; but I have seen the small ones, called "puffies." They are of a different kind from grampuses or porpoises; they are not a fourth part the size; a shorter make, quite a thick full fish. A young porpoise is a long fish.

You stated that you had seen those animals opened and found salmon in them; did you ever see any other fish found in them?—No, I cannot say I have.

No fish except salmon?—All salmon.

You consider that salmon is the only food of the grampuses?—No; I rather think they eat herrings. My opinion is, that they go away in search of herrings at the time when they leave the Tay.

Will you state whether you have any interest in the fishings where stake nets were formerly used, but are now forbidden by law?—I have no interest, but I have a lease from Mr. Dalgleish, in which there is a condition, that if stake nets shall be introduced during my lease, my rent shall be raised accordingly.

Have you any stake net fishings at this moment?—I have; I have a fishing at Musselburgh, which I am at liberty to surrender the lease of at every three year's end; and I think I have only three years to go after this; and I have another fishing of the Hon. Mr. Lindsay and Sir Robert Henderson's in St. Andrew's Bay; and this is my last year of the lease. I have Mr. Dalgleish's fishings, which I have already described, and how I stand there. I have Mr. Ross of Rossié's fishings, on the South Esk. I have another stake net fishing of the Lord Chief Commissioner, at Woodstone, which I am at liberty to surrender, in case my stake nets shall be put down. All my leases are very near done. I have not much above three years of the longest lease to run. I have another fishing, which is both stake net and coble fishing; but the principal value of it has always been in the river, situated on the North Esk, and in the bay at Montrose, belonging to Mr. Carnegie of Charlton. I think these are all the fishings I hold just now.

Have you a river fishery at Broughty ferry belonging to General Hunter?—I have.

It is a river fishery exclusively?—It is in the frith of Tay, just opposite the houses of Broughty ferry, where the Perth people come to sea bathing.

In which stake nets have lately been put down?—They were put down at the time the others were.

Has the rent of the fishing increased or diminished, in consequence of the putting down of the stake nets?—It has increased just now, at the last let.

To what extent has it increased; what was the former rent, and what is the actual rent?—It was let by private bargain formerly, and latterly it was let by public roup.

Do you consider General Hunter's fishing a good station for a stake net?—It is not so good as some of the others, it is better calculated for coble than some of the other stake net stations.

To what do you ascribe the increase of the rent since the stake nets were put down?—I consider that it was cheap let, to an old tenant of the general's before, by private bargain, and that I have introduced new improvements upon the coble fishing, as well as another coble and net upon an improved principle of fishing by net and coble; and if the fishing had been brought to roup formerly, they would have given a higher rent then as well as now.

Then you consider this improved mode of fishing with coble and net, to be just as good for the purpose, as the use of stake nets?—No; I consider that the stake net mode of fishing is much better than the new improved mode of coble fishing upon those shores belonging to General Hunter.

Then you consider that a greater number of fish might be taken in the stake nets than by any other mode of fishing?—I do; a much greater number.

You stated yesterday, that coble nets were destructive to the breed of fish in the rivers?—I do think they are.

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In places where there are no spawning beds, do you consider them destructive to the breed?—No, I do not, excepting to that part of the breed that is coming down the river to the sea, that they may haul them on shore by the coble nets in those stations where the fish may not be found to spawn.

Is there any other mode of fishing that you would recommend, as preferable to coble net fishing in rivers?—There are nets without such heavy ground ropes, and wide net, such as I have used this year in some parts of the North Esk for the purpose of taking large salmon; and they are so very light, that they do not drag down the spawning beds in the way and manner that a common coble net does.

What do you mean by wide nets; do you mean wide in the meshes?—Yes; always the wider a net is in the meshes, and the smaller the twine, she will be lighter in the water.

Must not the under rope of the net be so heavy as to sink the net to the bottom, in order to prevent the fish from escaping below the net?—I have used many of these sailing nets, without any under rope at all.

Then you must have used them in still water?—No; in running water, and took the old fish off the spawning beds without injuring the beds.

Have you used them with coble, or without coble?—I have used them with coble and without coble; and with another kind of boat which I have introduced for the first time on the north water, called The Trows.

Be so good as describe those trows?—They are the shape of two coffins put together at the one end, and a little smaller at one end than the other, where they are kept asunder; they are two separate boats fastened together at each end, leaving an open space in the middle.

What is the width of the meshes of these nets?—The width of the meshes of the smallest net that I have used in this way, is at least three inches from knot to knot upon the square.

Is that a sufficient width to allow the salmon fry to escape through?—Quite sufficient; they will never injure the salmon fry, nor ever take one on shore if their nets are like that.

Then there is nothing in the nature of coble nets destructive of the fry, if the nets be of sufficient width?—Nothing but the under rope, which is the great destruction, from the manner in which it is made and used.

Is it not thought necessary in many rivers, to have leaden weights on the under rope to sink the net?—Yes, it is so; they use them generally, cast iron now, for that purpose; I use them on the coble nets, but not on such nets as I have described; they are not used in these sailing nets which I have described before.

In what cases do you use the coble nets with these weights, and in what cases do you use the other nets you have described?—I use the coble nets with these weights, generally; and when the river is much flooded I add more of them to the bottom rope for the purpose of keeping her down, and preventing her running too fast along the bottom. I use the trows or sailing nets all along, where the coble cannot work because of rough ground, bad bottom, such as rocks and stones, where they cannot haul the coble net; then the light ground rope sails over the rocks and stones without fastening upon them.

Do you ever use coble nets without weights of any kind to sink the under rope?—No, I never did; all my coble nets have weights except in some instances; in the sea when we make the rope so thick and heavy, it does not require us to be at the expense of these weights; whenever there is any current or tide, we must always use weights, at least I always do, and round junks of ropes is frequently substituted.

Do the salmon always keep at the bottom, and endeavour to escape under the net, or do they attempt to go over the net?—No, they swim in different parts of the water, according to the time of day or night; sometimes they swim nearer the bottom, and sometimes nearer the top, according to the light.

When the net is near the side in particular, and when the salmon are disturbed, do they attempt to keep the bottom and to escape under the net, or to go over the net?—If they are inclosed, they first attempt to go to the top and then to the bottom.

Then it becomes absolutely necessary to keep the bottom rope close to the bottom of the river, particularly when drawn near the side?—At all times; if

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the bottom nets of coble nets are not kept near the bottom, the fish will go through, because it is made of narrow meshes, not for the purpose of catching fish by dragging them on shore.

You mentioned, that you had often caught fish full of food at the bottom of the rivers; do you say this from having dissected them, and inspected the contents of their stomachs?—Yes, I say it, because I have often seen it running out at the under part of the belly; I have seen the worm passing out there just like a straw crimped up; and I have had thousands of them dissected, when I have seen small sea fish in their stomachs.

It does not seem to follow from that circumstance, that the stomach was nearly full of food?—I cannot tell, there was food came out of them; I have seen thousands of fish opened in the boiling houses; and I have seen small things like a worm, and skeddens in the stomach of the salmon, or a small fish like a minnow.

Have you seen that species of food, or any other species of food, in considerable quantity in the stomachs of the fish?—No, I have not seen it in very considerable quantity in the stomachs of salmon.

In general, when you have seen the contents of the stomach of the salmon dissected, have you found much food or little food?—Little food.

Are there any particular parts of the sea or river where the salmon are caught, where you find more in their stomachs than in other places?—Yes; I think I have observed more of this worm and small sea fish in those fish we got from particular parts of the sea-shore.

I am speaking of the contents of their stomachs, not of what you observed on the outside of the fish.—No, I have not observed very much difference in the stomach.

Then can you draw any inference, from what you have seen in the stomachs of the fish, of their finding more food in any one place than another?—I cannot say that I can make a very accurate observation on that point, because I cannot say that I had a proper opportunity of comparing, at the same time, the stomachs of salmon from different parts of the sea and river, having always had the fish principally from the sea and friths, at least those fish that we opened in the boiling houses.

Then how do you reconcile what you have now said with what you stated yesterday, that the fish were full of food at the bottom of the rivers, and that therefore you concluded they were led up the rivers in search of food; why do you conclude they should go up in search of food any more than come down?—I consider they were in search of food, and had other instincts to lead them up the river; but they would soon come down the river again in search of food if they were allowed.

You stated the search of food as one cause?—I consider a salmon, wherever he goes, is in search of food.

Then that is no more reason for their going up the river than for their going down the river?—I think a salmon is very likely to seek his way either up or down, or in which way he can find the greatest quantity of food.

Is it your opinion that there is a greater quantity of food for salmon up the river or down the river?—I consider there is a much greater quantity of food down the river than up the river, as we find the salmon always in the highest perfection there, and we find the shores of the sea and the friths all full of small worms, of different descriptions, that come out of the sands every tide, upon which I suppose salmon and other fish feed.

Have you any other river fishing but General Hunter's, in which stake nets have been recently put down?—I have a fishing of Mr. Ross of Rossies; and I understand there was formerly a stake net there.

Can you tell whether the produce of the rent of the fishing has increased or decreased since the stake nets were put down?—The rent of the upper part of the river, above Mr. Ross's, has fallen in rent since the stake nets were put down in the basin above Montrose, or estuary in the South Esk, and so has Mr. Ross of Rossie.

To what cause do you ascribe that?—To the same cause that applies to all the rivers, the want of protection, and the increased quantity of milldam dikes near the sea; one milldam dike near the sea will do more injury than all the stake nets in the kingdom.

Is it your opinion that stake nets in an estuary have an influence on the produce of the fisheries in the upper parts of the river?—I think the stake nets in an estuary must, in a small degree, affect the produce of the upper parts of the river, but that only in a small degree; and in the whole course of my practice in fishing I have always found, in dry weather in summer, a greater quantity of fish taken in the nets placed for the purpose of catching them by the ebb tide, than in wet weather; and on the coast, near the mouths of the estuaries, a great number of the stake nets that are usually erected there, are placed for the catching of fish upon the open coast, they are generally placed so as to take them going away from the estuaries; some I have placed myself at present, and I know a number more that are placed in the like manner, and they are generally placed for taking the fish going away from the estuaries; and, from the construction of these nets, they cannot take the fish that are going towards the river or estuary.

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Do you consider the stake nets to be of the same form and construction in all estuaries?—The stake nets differ very much in their form and construction, according to their situation. I have succeeded upon different stations with a stake net where the stake net fisher before me had failed, merely from the improvement in the construction of the net upon that station.

The stake nets, then, are always constructed, in your opinion, so as not to injure the river fishing?—I do not say that they are so constructed as always not to injure the river fishing, but I think the stake nets, in some small degree, may injure a river fishing and the estuaries, where some of the fish may go to; but in the greatest number of the estuaries I am acquainted with I find the fish are much easier taken going down into the sea than coming up.

Is the Committee to infer, that the quantum of injury done to the river fishings by stake nets, depends entirely upon the manner in which these stake nets are constructed, not on the existence of stake-nets?—I do not consider that the injury the river fishings may receive by the mode of stake net fishing in the estuary, does at all depend upon the construction of the stake nets; I would beg leave to add to that, if the meshes of the nets are sufficiently wide.

When you mentioned fish that were going away from the estuary, did you mean fish that were about to leave the river and the estuary, not to return, or fish that were merely ebbing and flowing with the tide?—I mean, both fish that were going away from the estuary, that I did not suppose might ever return, and fish that were going and coming with the tide also.

Why did you suppose that?—Because I had nets placed upon the sea-coast, beyond both the estuaries of the North and South Esk. I have a net upon the Woodstone fishing, constructed for taking the fish on their way along the coast, as we might say, towards Aberdeen or the north pole, several miles north of the mouth of the South Esk and some miles north of the mouth of the North Esk; all the fish that net takes are going away from the estuary of both of these rivers, and it is not likely they might return to either the one or the other of them, as an immense number of seals and porpoises frequent that shore, and they would very likely be taken before their return.

Is it not common in other parts of estuaries, for salmon to ebb and flow with the reflux of the tide?—Yes, it is.

When the witness speaks of the effects of stake net fisheries, either upon the general produce of the fisheries, or upon what have been termed the upper fisheries, does he always wish to be understood as speaking of such stake nets as are constructed in what he considers a fair and proper manner?—I consider that I have been speaking of such stake nets as have been constructed in a fair and proper manner.

And should you consider that your observations would not apply to stake nets, if they could be shown to be constructed in any way that should give an advantage to them in the taking of fish, or destruction of fry, different from the stake nets of which you have spoken?—I am not aware of any way that there could be any advantage in destroying the fry.

Should you apply your observations to stake nets, if they were carried an undue length from the shores?—I do consider that stake nets that might be carried far up into the shallows of the rivers, and might be extended beyond the low water mark upon those shallows, must be injurious, but as long as they

are

Mr. John Halliday. (May 28.)

are kept down to where the tide is constantly ebbing and flowing, it is impossible for a stake net to be carried into the channel or stream. Unless they were fixed on rocky ground, the stakes would fall by means of the ground going away from them.

Is it your opinion that the quantity of fish in any particular river or estuary, depends upon the protection of those particular rivers, or upon the protection given to all the rivers throughout the different coasts of the kingdom?—The protection given to all the rivers throughout the different coasts of the kingdom.

Lunæ, 31° die Maij, 1824.

THOMAS FRANCIS KENNEDY, ESQUIRE,

IN THE CHAIR.

Mr. *Christopher Kerr*, called in; and Examined.

Mr. Christopher Kerr. (May 31.)

HAVE you a copy of the state of the process of declarator, at the instance of his grace the Duke of Athol and others, v. the honourable William Maule, &c. dated the 4th July 1810?—I have.

[*The witness delivered in the same.*]

Can you state to the Committee, that this is a correct copy of this process?—I believe it to be so, and I know that it is received and quoted at all times as such.

[*The following extracts were read:*]

James Sime, tenant, at Wester Flisk, under Lord Dundas, married, aged 55 years, being solemnly sworn, &c. depones, that since the year 1784, the deponent has fished for spirlings in the river Tay, a little to the west of Flisk church, for which purpose the deponent uses a net with a small mesh, which is fixed by stakes in the river, about forty or fifty yards from high water mark; that this is a seine or bag-net, the mouth of which looks up the river; that the spirlings are caught when the tide ebbs by being inclosed in it, and some few by hanging in the meshes. Depones, that this spirling-fishing continues from October until the end of April, unless in so far as the ice in the river prevents them. Interrogated, depones and produces a copy of instructions, bearing to be subscribed by the counsel for the defenders, which the deponent received from Mr. Wedderburn at Birkhill, directing the deponent to make a survey of the river for the objects therein specified; that this survey the deponent began upon the 18th day of April last; that the deponent was desired by Mr. Wedderburn to select a person to make the survey along with the deponent, and he chose Stewart Shepherd, tenant at Balmerino, as being the person, so far as the deponent knew, best qualified, without any interest in the fishing, to assist in the proposed survey. Depones and exhibits a holograph note, stating the result of the survey made up from jottings taken at the time, which is subscribed by the deponent, and marked by the commissioner as relative hereto; and the result of this survey is, that he has inspected the whole stake nets which are erected this season in the Tay; and he has never found in any of them either salmon fry or small fish of any kind, except a few flounders. Depones, that in obedience to the second instruction, the deponent also traced the salmon fry in the Tay, and produces a note of his observations on that point, made up from jottings at the time, and subscribed by himself, which is also marked by the commissioner as relative hereto. Depones, that he has been acquainted with salmon fry for twenty-seven years; and on the 28th of April last, he saw a great quantity drawn ashore at Stockgreen, by the nets used in the net and coble fishing, part of which were left on the bank, and part went back again into the river with the net. Depones, that the deponent and Shepherd never used the small meshed net above the mouth of the Earn, as the salmon fry was visible to the naked eye in the Tay, a little above that spot; and the reason

for

for using the small meshed net at Carpow was, because the salmon fry there ceased to be visible. Depones, that the result of this survey is, that below Carpow bank, the deponent and Shepherd found no salmon fry, although they fished the river with the small meshed net, both in the eddy water and in the stream. Depones, that during all the time he has fished for spirlings, he has never found any salmon fry in these spirling nets, although the deponent believes that the fry goes down the river in the month of April; and the nets used for catching spirlings are so small in the mesh, that they would catch salmon fry as they have caught spirling fry, which is smaller than salmon fry. Depones, that during the survey of the stake nets along with Shepherd, the deponent just saw one foul fish or kelt in the Monorgan stake net, which was taken out and thrown back into the river. Depones, that during their survey, the deponent was generally in the stake net before the fishers came to take out the fish. Depones, that they observed salmon fry in the Tay till the 28th day of April, when they first saw them at the coal shore, immediately below Perth, in thousands, and found them downwards all the way till within half a mile above the junction of the Earn with the Tay. Depones, that at high water, and at the first of the flood, the deponent observed the fry in the easy water, near the side of the river, and when the tide ebbed, they appeared to go into the current; and the last fry which the deponent caught with the net in going down the river, was in the channel opposite to Carpow bank. And this is truth, &c.

Mr. Christopher Kerr.

(May 31.)

Stewart Shepherd, tenant at Balmerino, married, aged 30 years and upwards, being solemnly sworn, &c. depones, that he was employed by Mr. Wedderburn, at Birkhill, this season to make a survey of the river Tay, according to the written instructions received from that gentleman; and being shown the paper of instructions produced by the preceding witness, depones, that it is the same that the deponent alludes to, and it is marked by him as relative to this deposition. Depones, that James Sime, the preceding witness, was employed along with the deponent on this survey. Depones, that the deponent and Mr. Sime proceeded to make the survey, as directed and marked down in a book which he now produces, the result of each day's survey; and which book is marked by the deponent and commissioner as relative to this deposition; that the deponent and Sime always made this survey together, except during the period from the 13th to the 17th June exclusive, when the deponent was prevented by business from attending, and also from the 22d of May to the 1st of June, during which time Mr. Sime was prevented from attending the survey along with the deponent, owing to the indisposition of his wife; but the deponent believes, that during that time, Mr. Sime surveyed the Birkhill stake net, which was nearest to his own house. Depones, that he is perfectly acquainted with salmon fry; and what is contained in the book produced by the deponent, is an accurate account of what the deponent actually observed each day; the general result of which is, that he saw no salmon fry in any of the stake nets, and the only fry he saw was what the deponent considered to be garvie fry, during the time when Mr. Sime was prevented from attending the survey. Depones, that in consequence of the second branch of instructions, the deponent and Mr. Sime went up the river to discover salmon fry; that they discovered none above Perth, but they saw abundance at the coal shore of Perth, and found them all the way down to within half a mile or three quarters of a mile of Carpow bank, when they lost sight of them; that they had no occasion to use any net to discover the fry till they came to that spot, as they were visible to the naked eye; that when they thus lost sight of them, they made a draught with a spirling net and found them in the very middle of the channel. Depones, that on the 28th of April, at Stock Green, about three miles below Perth, the deponent saw a quantity, between twenty and thirty, of salmon smolts drawn ashore by the net used in the net and coble fishing, some of which was killed and some fell into the water again. Depones, that from Carpow bank down to below Broughty, the deponent and Mr. Sime made trials in every part of Tay for salmon fry, but found none. Depones, that for two seasons before the last, the deponent has fished for spirlings opposite to his farm, which the deponent commenced after the salmon fishing ends, and continued till the salmon fishing again commences. And this is truth, &c.

Mr. Christopher Kerr.

(May 31.)

LXXVII. Instructions for ascertaining whether the fry of salmon be destroyed or not by the stake nets on the Tay, referred to in the depositions of James Sime, p. 94, and of Stewart Shepherd, p. 95, of the following tenor:

19th March, 1809.

1st. That a proper person or persons should be selected by the defenders for the purpose of ascertaining the material fact, whether salmon fry be injured or not by the stake nets, and that notice of the appointment of him or them be given to the pursuers, that it may not be said the observations to be made are partial and arise from the nonsuggestions of proper objects of inquiry.

2d. That the person or persons so appointed should go up the Tay, till they find the fry and see them distinctly seeking their way downwards to the salt water; that when the fry are discovered, they should be carefully traced till they change their situation in the water, that is where they leave the sides or easy water and go more into the stream; and at this particular place, when they change their situation, the water should be tasted and its nature ascertained, as to its being fresh, brackish or salt, and the precise point on the coast should likewise be specified. The fry should then be farther traced and watched minutely till they disappear entirely; and the point at which this happens should be marked on the coast, and the nature and quality of the water again ascertained, as well as the mode in which they seem to disappear.

D 3d. The stake nets should also daily be examined, in order to discover whether any salmon fry be ever seen in them; and likewise to ascertain what are the different sorts of small fish which are known to be inclosed in these nets.

E 4th. I think that under the point where the fry disappear, between that and the ocean, nets with very small meshes should frequently be drawn in the water, between high and low water marks, in order to prove whether any salmon smolts are to be found in that body of the tide.

F Lastly. It may be right to observe in general the mode of catching the salmon and taking them out of the stake nets.

(Signed) *J. W. Murray.*

G LXXVIII. First holograph note referred to in the deposition of the said James Sime, p. 94, of the following tenor:

April 18, 1809. Surveyed Birkhill, Horney and Northam stake net fishings; found no salmon fry, nor small fish of any kind.

H April 19. Jock's Hole, Peasehills, Longcraig and Woodhaven; found no salmon fry, nor small fish of any kind.

April 20. Craighead, Yardheads, Lark and Luckyscalp; found no salmon fry, nor small fish of any kind.

April 21. Bonden, Monifieth, Milton Bay, Broughty, Townhead Cruke, John Brown's Shot, West Ferry and Hair Craigs; found no salmon fry, nor small fish of any kind.

April 22, 1809. Wilk's Beach, Bottlework and Maidlengare; found no salmon fry, nor small fish of any kind.

May 1. Birkhill, Norham, Horney, Jock's Hole and Peasehills; found no salmon fry, nor small fish of any kind.

May 2. Longcraig, Woodhaven, Craighead; found no salmon fry, nor small fish of any kind.

May 3. Yardheads, Lark, Luckyscalp and Bowden; found no small fry, nor small fish of any kind.

May 4. Monifieth, Milton Bay and Broughty; found no salmon fry, nor small fish of any kind.

May 8. Monorgan, Mylnefield; found no salmon fry, nor small fish of any kind.

May 9. Maidlengare; found no salmon fry, nor small fish of any kind.

May 20. Birkhill; 22d, Birkhill; 25th, Birkhill; 26th, Birkhill; found no salmon fry, nor small fish of any kind.

June 1. Peasehills; found no salmon fry, nor small fish of any kind.

E June 2. Wilk's Chingle, Haircraigs, West Ferry, John Brown's Shot, the Cruke Townhead and Broughty; found no salmon fry, nor small fish of any kind.

June 7.

Mr. Christopher Kerr. (May 31.)

June 7. Monorgan and Mylnefield; found no salmon fry, nor small fish of any kind.

June 8. Maidlengare; found no salmon fry, nor small fish of any kind.

F June 9. Woodhaven; found no salmon fry, nor small fish of any kind.

June 10. Longcraig, Peasehill, Jokeshole, Horney, Norham stake net fishings; found no salmon fry, nor small fish of any kind.

G June 12. Craighead, the Commons Yardheads; found no salmon fry, nor small fish of any kind.

June 13. The Lark, Luckyscalp, Bouden, Monyfieth, Milton Bray, Broughty; found no salmon fry, nor small fish of any kind.

H June 14. Townhead, Cruke, John Brown's Shot, West ferry, Haircraigs, Wilk's Chingle, and Bottlework; found no salmon fry, nor small fish of any kind.

June 15. Maidlengare stake net fishing; found no salmon fry, nor small fish of any kind.

June 16. Monorgan, Mylnefield, and Endergourne; found no salmon fry, nor small fish of any kind.

A LXXIX. Second Holograph Note referred to in the deposition of the said James Sime, p. 94, of the following tenor:

April 24, 1809. Perth; made no discovery.

April 25. Dunkeld; made no discovery.

April 26. At the Bridge of Perth; found four black fish killed.

B April 27. At Luncarty; one black fish killed.

April 28. At the Bridge of Perth; two black fish killed; and at Stockgreen two black fish killed, and a great number of salmon smolts by the fisherman.

C May 11. Made no discovery when fishing the small meshed net between Carpow bank and the mouth of Erne.

May 12. When tracing with the above net, found salmon fry, or smolts, in the channel, at the foot of Carpow bank, in a right line with Carpow thorn-tree; the water fresh.

D May 13. Surveyed the Fife shore from Flisk Point; found sea ware growing on stones all the way up to Cumcasemiln beach.

Ditto. Traced with the net off Mugdrum House, off the shore of Newburgh, a little below the Pow of Lindores, off Balmbreich, and the Webster's House; found no salmon fry, or smolts, but a great number of spirlings.

E May 15. Off Flisk Point; found nothing but spirlings.

May 16. Off Balmerino; found no salmon fry; a few spirlings.

May 17. Off Woodhaven and the North ferry, and down below Broughty Castle, found nothing.

F May 18. Off the South ferry, crossed over to the North side, off the Wilk's Channel and off the Bottle works; found nothing.

May 19. Off the Maidlengare; found nothing.

G May 31. Inspected the tides at Flisk Point, low water; by fixing a pole in the water, we found the water or flood tide rise from four to five inches in the space of fifteen minutes, before we could perceive it to stop or run up.

LXXX. Memorandum Book referred to in the deposition of the said Stewart Shepherd, p. 95, containing the following entries:

H April 18, 1809. Surveyed Birkhill stake net fishing; found no salmon smolts, nor small fry of any kind.

Surveyed Norham stake net fishing; found no salmon smolts, nor small fry of any kind.

Surveyed Horney stake net fishing; found no salmon smolts, nor small fry of any kind.

I April 19. Surveyed Jock's-hole stake net fishing; found no salmon smolts, nor small fry of any kind.

A April 19. Surveyed Peasehill stake net fishing; found no salmon smolts, nor small fry of any kind.

Surveyed Longcraig stake net fishing; found no salmon smolts, nor small fry of any kind.

April 20.

April 20. Surveyed Craighead stake net fishing; found no salmon smolts, nor small fry of any kind.

B Surveyed Yardheads stake net fishing; found no salmon smolts, nor small fry of any kind.

Surveyed Larack stake net fishing; found no salmon smolts, nor small fry of any kind.

C Surveyed Luckyscalp stake net fishing; found no salmon smolts, nor small fry of any kind.

April 21. Surveyed Bouden stake net fishing; found no salmon smolts, nor small fry of any kind.

Surveyed Monifieth stake net fishing; found no salmon smolts, nor small fry of any kind.

D Surveyed Milton stake net fishing; found no salmon smolts, nor small fry of any kind.

Surveyed Bay stake net fishing; found no salmon smolts, nor small fry of any kind.

E Surveyed Broughty stake net fishing; found no salmon smolts, nor small fry of any kind.

Surveyed Cruick stake net fishing; found no salmon smolts, nor small fry of any kind.

Surveyed Townhead stake net fishing; found no salmon smolts, nor small fry of any kind.

F Surveyed John Brown's shot stake net fishing; found no salmon smolts, nor small fry of any kind.

Surveyed West ferry stake net fishing; found no salmon smolts, nor small fry of any kind.

G Surveyed the Haircraig stake net fishing; found no salmon smolts, nor small fry of any kind.

April 22. Surveyed Wick's-chingle stake net fishing; found no salmon smolts, nor small fry of any kind.

Surveyed Bottle-work stake net fishing; found no salmon smolts, nor small fry of any kind.

H Surveyed Maidlengare stake net fishing; found no salmon smolts, nor small fry of any kind.

May 1. Surveyed Birkhill stake net fishing; found no salmon smolts, nor small fry of any kind.

I Surveyed Norham stake net fishing; found no salmon smolts, nor small fry of any kind.

A May 1. Surveyed Horney stake net fishing; found no salmon smolts, nor small fry of any kind.

Surveyed Jock's-hole stake net fishing; found no salmon smolts, nor small fry of any kind.

B Surveyed Peasehill stake net fishing; found no salmon smolts, nor small fry of any kind.

May 2. Surveyed Longcraig stake net fishing; found no salmon smolts, nor small fry of any kind.

Surveyed Woodhaven stake net fishing; found no salmon smolts, nor small fry of any kind.

C Surveyed Yardhead stake net fishings; found no salmon smolts, nor small fry of any kind.

Surveyed Craighead stake net fishing; found no salmon smolts, nor small fry of any kind.

D May 3. Surveyed Larack stake net fishing; found no salmon smolts, nor small fry of any kind.

Surveyed Luckyscalp stake net fishing; found no salmon smolts, nor small fry of any kind.

Surveyed Bouden stake net fishing; found no salmon smolts, nor small fry of any kind.

E May 4. Surveyed Monifieth stake net fishing; found no salmon smolts, nor small fry of any kind.

Surveyed Milton stake net fishing; found no salmon smolts, nor small fry of any kind.

F Survey Bay stake net fishing; found no salmon smolts, nor small fry of any kind.

Surveyed

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Surveyed Broughty stake net fishing; found no salmon smolts, nor small fry of any kind.

May 8. Surveyed Monorgan snake net fishing; found no salmon smolts, nor small fry of any kind.

G Surveyed Mylnefield stake net fishing; found no salmon smolts, nor small fry of any kind.

May 9. Surveyed Maidlengare stake net fishing; found no salmon smolts, nor small fry of any kind.

H May 20. Surveyed Birkhill stake net fishing; found no salmon smolts, nor small fry of any kind.

May 22. Surveyed Norham stake net fishing; found no salmon smolts, nor small fry of any kind.

I Surveyed Horney stake net fishing; found no salmon smolts; a few small fry, I suppose garvy fry, swimming in two feet and a half water.

A May 22. Surveyed Jock's Hole stake-net fishing; found no salmon smolts, nor small fry of any kind.

May 23. Surveyed Peasehill stake net fishing; found no salmon smolts, nor small fry of any kind.

Surveyed Longcraig stake net fishing; found no salmon smolts, nor small fry of any kind.

B Surveyed Woodhaven stake net fishing; found no salmon smolts; some small fry swimming in three feet water, I suppose garvy fry.

May 24. Surveyed Craighead stake net fishing; found no salmon smolts, nor small fry of any kind.

C Surveyed Bake Comen stake net fishing; found no salmon smolts, nor small fry of any kind.

Surveyed Yardhead stake net fishing; found no salmon smolts, nor small fry of any kind.

D May 25. Surveyed Larack stake net fishing; found no salmon smolts, nor small fry of any kind.

Surveyed Luckyscalp stake net fishing; found no salmon smolts, nor small fry of any kind.

Surveyed the Bouden stake net fishing; found no salmon smolts, nor small fry of any kind.

E May 26. Surveyed the Milton stake net fishing; found no salmon smolts, nor small fry of any kind.

Surveyed Monifieth stake net fishing; found no salmon smolts; some small fry, I suppose garvy fry, swimming in one foot water.

F Surveyed the Bay stake net fishing; found no salmon smolts, nor small fry of any kind.

F Surveyed the Cruick stake net fishing; found no salmon smolts, nor small fry of any kind.

Surveyed Townhead stake net fishing; found no salmon smolts, nor small

G fry of any kind.

Surveyed John Brown's shot stake net fishing; found no salmon smolts, nor small fry of any kind.

Surveyed Haircraig stake net fishing; found no salmon smolts, nor small fry of any kind.

H Surveyed Wilk's-chingle stake net fishing; found no salmon smolts, nor small fry of any kind.

Surveyed Bottlework stake net fishing; found no salmon smolts, nor small fry of any kind.

I May 27. Surveyed Maidlengare stake net fishing; found no salmon smolts, nor small fry of any kind.

A May 27. Surveyed Mylnefield stake-net fishing; found no salmon smolts; some spirlings.

May 30. Surveyed Monorgan stake net fishing; found no salmon smolts, nor small fry of any kind.

B June 1. Surveyed Jock's Hole stake net fishing; found no salmon smolts, nor small fry of any kind.

Surveyed Peasehill stake net fishing; found no salmon smolts, nor small fry of any kind.

June 2. Surveyed Wilk's-chingle stake net fishing; found no salmon smolts, nor small fry of any kind.

Mr. Christopher Kerr. (May 31.)

Surveyed Haircraig stake net fishing; found no salmon smolts, nor small fry of any kind.

Surveyed John Brown's stake net fishing; found no salmon smolts, nor small fry of any kind.

D Surveyed Cruick stake net fishing; found no salmon smolts, nor small fry of any kind.

June 2. Surveyed Townhead stake net fishing; found no salmon smolts, nor small fry of any kind.

Surveyed Broughty stake net fishing; found no salmon smolts, nor small fry of any kind.

E June 7. Surveyed Monorgan stake net fishing; found no salmon smolts, nor small fry of any kind.

Surveyed Mylnefield stake net fishing; found no salmon smolts, nor small fry of any kind.

F June 8. Surveyed Maidlengare stake net fishing; found no salmon smolts, nor small fry of any kind.

June 10. Surveyed Horney stake net fishing; found no salmon smolts, nor small fry of any kind.

Surveyed Norham stake net fishing; found no salmon smolts, nor small fry of any kind.

G June 16. Surveyed Monorgan stake net fishing; found no salmon smolts, nor small fry of any kind.

Surveyed Mylnefield stake net fishing; found no salmon smolts, nor small fry of any kind.

H June 17. Surveyed Birkhill stake net fishing; found no salmon smolts, nor small fry of any kind.

Surveyed Norham stake net fishing; found no salmon smolts, nor small fry of any kind.

June 19. Surveyed Longcraig stake net fishing; found no salmon smolts, nor small fry of any kind.

I Surveyed Woodhaven stake net fishing; found no salmon smolts, nor small fry of any kind.

A Bridge of Perth, April 26, 1809. Found four black fish killed.

April 27. At Luncarty fishing, one black fish killed.

April 28. At bridge of Perth fishing, two black fish killed. At Stockgreen fishing, two black fish killed, and a number of salmon smolts.

B May 12. Found salmon smolts at the foot of Carpow Bank, in a right line with Pitfour House and Carpow Thorn-tree.

May 13. Surveyed the Fife shore; found sea ware up to Cumcase Mill-beach.

Fished off Newburgh and off the Pow of Lindores, and off Balmbreich Castle, and the Webster's House, and nothing but spirlings.

May 17. Fished off Woodhaven; found nothing.

Fished off the North Ferry; found nothing.

Fished off Broughty Castle; found nothing.

May 18. Fished off the South Ferry; found nothing.

Fished off the Wilks Chingle; found nothing.

Fished off the Bottlework; found nothing.

May 19. Fished to the westward of the Maidlengare; nothing.

E May 20. Surveyed the tide on the bank of Balmerino, the Kile and Beach-tree; in one found no interval.

May 31. Surveyed the tide on Frisk Point at low water; the water rose from four to five inches in fifteen minutes, before we could perceive it to stop and flow up.

Mr. *Stewart Shepherd,* called in; and Examined.

Mr. Stewart Shepherd.

WERE you long resident on the banks of the Frith of Tay?—I was.

Had you frequent opportunities, in your early days, of examining the salmon fisheries on the banks of the Tay?—I had.

At what places have you had such opportunities?—Principally at Balmerino, one of the principal stations on the banks of the Tay.

State what other opportunities you have had?—My father rented a small farm and mill from Lord Moray; the mill was very ill supplied with water in the summer season, and it was a universal practice of the millers always to fish during

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during the summer months; my grandfather and father were both fishers; and of course, as I was always going about the fisheries, I was perfectly well acquainted with the modes then practised.

How long did you continue to reside on the banks of the Tay?—Eighteen years.

Did you afterwards leave the Tay, and go to sea?—I did.

And how long were you a seaman?—About six years, or nearly so.

Were you in the royal navy?—I was the greater part of my time in the royal navy, excepting one voyage to the East Indies.

In what year did you return to Balmerino?—To the best of my recollection, in 1797.

Was it about that time that stake nets were then used in the Tay?—Yes, I think it was; there was no other but seaside net I think at that time, but I hardly recollect; it was about that time.

Did you continue to reside at Balmerino for a number of years after your return from sea?—I did.

For how many years?—For 14 years.

Was your residence near to the fishery?—It was.

And had you, after your return, daily opportunities of observing the fisheries?—I had.

Did you frequently visit the nets?—I did; my farm bounded the neighbouring nets along the shore, of course I had frequent opportunities of inspecting them.

What were the modes of fishing in use on the south side of the Frith of Tay, before the stake nets were introduced; were they what are called stage nets?—Stage nets and foot nets, that was the name of these modes.

How many nets of that kind were there near to Balmerino?—To the best of my recollection, between Greenside and Birk-hill West March, there were 14.

Stage or foot nets?—Stage nets; as to the foot nets I am not so correct, for it was only in some situations where they could be used.

Was the stage net a fixed net, or was it moveable, like a coble net or floating net?—It was a fixture.

Be so good as to describe to the Committee a stage net, as shortly as you can?—A land arm generally runs with a curve up the stream, which serves the double purpose of a gangway to the stage, and of a leader to the net; that leader was all done up with stake and rice, so that the fish could not get through; the stage was from four to five feet broad where the fishermen stood to fish the nets; the nets were fixed upon a long pole, from 18 to 24 feet long; they were fixed to the bottom of this long pole, which went upon sliders; there was then a rope, which came from the centre of the net to the stage; when they began to fish, which was only with a flood tide, they put down this net with a long pole to the bottom; they then hauled this rope up to the stage, which opened the mouth of the net to its full extent; they then had a small line, which came within a few yards of the extreme length of the net; the fisherman upon the stage puts this line over his finger, and then he sat on the stage till the fish came in; the fish generally struck upon that point where the string was fastened; that caused a tremble on the finger; he immediately ran and hauled up that net; he killed the fish, took it out, and then let down the net again into the water.

Could you produce to the Committee a sketch of the net you have described?—Certainly.

Be so good as to deliver in such a sketch to the Committee?—I will.

Were the stage nets all removed from the south side of the Frith of Tay after the stake nets were begun in the frith?—No, they were not at that period.

In your description of the stage net, you mention that a part of it was made of stake and rice?—Yes.

Was that a thick wicker work, made of coarse branches of trees?—Yes, faced up with branches of trees.

Was that a construction which intercepted any thing that might be floating in the water, and might catch the salmon fry?—I do not think it could injure the salmon fry; it was not close enough for that purpose, but it was so close that a salmon could not get through.

Could the salmon fry get through?—Certainly, in a great many places they could.

In

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In point of fact, have you seen salmon fry caught in that stake and rice part of the stage net?—Never, in my life.

Have you now removed from Balmerino to another part of the country?—I have.

Are you in any way connected with the Tay or the salmon fishery?—No, I am not.

Had you, at any time, any interest in the Tay salmon fishery?—Never, in my life.

Were you employed, about the year 1809, to make a survey of the Tay, with reference to the stake nets and the salmon fry?—I was.

Have you reason to believe that you were employed for that purpose as a person who was disinterested, and at the same time who had had ample opportunities of obtaining knowledge upon that subject?—I have reason to believe so.

Was there any other person employed to act along with you?—There was.

Mention his name?—A Mr. Syme, of Easter Flisk.

Did you and Mr. Syme receive instructions as to what it was the desire of the court you should do?—We did.

Are those similar to the written instructions which you received?—[*showing a printed paper to the witness, No. 77 in the state of the Tay process*]—Those were the instructions which we had, and under which we acted.

Do you know that the person who signs them (Mr. Murray) was then one of the counsel for the defenders, and is now Lord Cringletie, one of the Judges of the court of Session in Scotland?—I do.

Did you and Syme make a survey in the terms of these instructions?—We did.

State your proceedings in doing so?—It will be found in the minutes of the court.

Did you keep a written memorandum of your survey each day?—I did.

Were you afterwards examined upon oath, and did you give the memorandum to the commissioners, to be reported to the court of Session?—I did.

Be so good as to look to the Appendix of this process, Nos. 78, 79 and 80, and state to the Committee, whether they are correct copies of the notes and memorandums which were made by you and Symes, according to the instructions which have been previously referred to?—[*The same was handed to the witness, who examined it.*]—It is an exact copy of my memorandums.

Were you perfectly acquainted with salmon fry, or could you make any mistakes respecting them?—I could make no mistake as I was perfectly acquainted with them.

Is the Committee to understand that the general result of your survey was, that no salmon fry were ever to be found in any of the stake nets in the frith of Tay?—None.

Did you examine every stake net in the Tay?—Every one.

On both sides of the frith, and from the one end to the other?—I did.

Did you make this examination oftener than once?—We did.

Were you generally in the nets before the fishermen?—Generally the first net; indeed I may say always; we went through as many in a tide as the water would allow us; we had sea boats for the purpose.

Do you consider that you could in any manner have been deceived, or that the fry could have been in the nets, and that you should not have seen them?—They could not have been in the nets without our seeing them, for we examined every part of the net most minutely.

Did you trace the progress of the fry down the river to the frith?—We did.

Did you find them in the river in easy water at the sides?—we did.

Did you find them there uniformly?—Yes.

How far down the Tay did you find them at the sides?—at about half or three-quarters of a mile above the junction of the Earn and Tay; they were quite distinct there to the naked eye.

Is that the point at which you consider that the frith begins?—I think it should be a little below that, but not a great deal.

How much?—I think it should be a little below Carpow Bank, between that and Newburgh.

Did they at this last mentioned place disappear from the sides, and go into the deep water?—They did.

Did

Mr. Stewart Shepherd.

(May 31.)

Did you endeavour to ascertain whether they were not in the deep water between high and low water mark, although you could not see them?—Yes, we endeavoured.

What means did you take to ascertain this?—We had a net with small meshes fixed upon a square, with heavy sinkers upon one of the squares to sink the upper square to the surface of the water; we then slung it to the stern of the boat with a long rope; when the wind was going against the tide, we drifted the river, and when the wind was not going against the tide, we were obliged to bring the boat up; that was the process.

Did you find any fry between high and low water mark?—None.

Then you are quite certain that none are between high and low water mark, and that all the fry after going into the frith keep in the mid channel?—That is my decided opinion.

Do you consider that the surf or agitation of the water between high and low water mark in the frith compels them to go into the deep water?—I think so; and likewise the swell in the deep water forces them to go deeper down; there is very often a heavy swell in the mid-channel, though not much wind, owing to the reflux of the tide.

Have you known any of the stake nets extend into the mid channel?—None.

Were all of them confined exclusively to the banks and shallows?—Yes.

Then do you consider that the fry never come within the reach of the stake nets?—I think so.

Is that the case also with the coble nets?—No.

State the grounds upon which you form that opposite opinion?—The coble nets, most of them, are used in the narrow waters, generally on the spawning beds, and of course must injure them less or more.

Do you mean to state, that the coble nets are used in those parts of the river where you have previously stated that the fry are to be found?—Yes.

You have said, that you have found the fry swimming in the easy water at the sides of the river?—I have.

Are those the places where the coble nets are generally drawn on shore?—Generally.

Can you state the size of the meshes of the coble nets?—Not exactly; but to the best of my recollection, they were about an inch, or rather better, from knot to knot.

What was the size of the mesh of the stake net?—I suppose some of them would be three, and some of them two inches and a half from knot to knot; I tried them often when I was upon the survey, which I did by putting my hand into them diagonally, which was about the width of them.

Is the Committee to understand, that while the stake nets in the frith are placed in situations where the fry are never to be found, the coble nets in the river are used in the very places where the fry are swimming on their way down to the sea?—Certainly.

In point of fact, did you ever see any of the fry destroyed by the coble nets in the river?—We have.

State the places where you have observed this to take place?—To the best of my recollection, I think it was Stock Green fishing, the first time we went up there on our survey.

In what part of the Tay is Stock Green?—It is below Perth.

It is above the junction of the Earne, is it not?—Yes, a long way.

Is it between Perth and Kinfairns?—Yes, I think so.

Have you seen such destruction more than once?—No; I never recollect seeing it more than once.

Do you consider, that that is because you have not made it your business to observe it, or because it did not exist in point of fact?—The fishermen did not know us when we went up first; we went upon them by accident, and we saw salmon smolts killed, but afterwards they knew perfectly what we were about, and of course after that they were not hauled ashore, as the fisherman could mostly prevent it if he chose.

Then the Committee is to understand, that you are certain no salmon fry were taken or to be seen in the stake nets, while you saw salmon fry destroyed by the coble nets in the river?—I am perfectly certain of it; I am certain they did.

Mr. Stewart Shepherd.
(May 31.)

Have you had occasion to observe the effects of the stake nets with reference to the young of other fish?—I did.

Did you observe any considerable number in the nets?—No, we did not.

State what you have remarked?—I believe once or twice there were a few garvie fry swimming in about a foot or two feet of water.

Have you seen such small fish in the pools, on the banks and among the rocks?—Yes, I have often.

Do you consider that the stake nets in the Tay were in any degree injurious to the young of other fish?—No.

Had you occasion to observe, during your survey, whether foul fish were caught at any of the river fishings in the end of April?—I have.

Did you at any time during your survey, find foul fish in the stake nets?—Never, but one.

You have already stated that you were generally in the stake nets before the fishers?—We were generally at the first net before them.

Then do you think that if foul fish were caught in stake nets, that you must have been aware of the fact?—Certainly.

You stated that you have frequently visited the stake nets during the time you resided near the Tay?—I did.

Does it consist with your knowledge, that some of the stake nets caught fish only with the ebb tide?—Yes, several of them.

Do you consider that the fish caught by these nets, were those principally going out of the frith down towards the sea?—No doubt of it, they were going down with the ebb.

State what you know as to the number of nets in the Tay, and their success?—There were some of them very successful, but as to the number I cannot precisely say; I recollect two or three that fish only with the ebb, and most of the others that fish with the flood have an ebb court.

Do you mean to be understood as saying, that there were a considerable number of ebb nets in the Tay, though you do not happen to be minutely acquainted with them?—Certainly, I do mean to be so understood.

Have you any reason to know whether a greater number of salmon are caught by ebb nets, or by nets of an opposite description?—The greatest part, I should think, are caught by flood nets, taking the whole of the frith.

Are there a great number of grampuses, or porpoises, or seals, which frequent the Tay during the fishing season?—A great number indeed.

At what time do they appear, and what time do they remain?—They generally appear about the end of April or the first of May.

Does it consist with your knowledge that great numbers of salmon are destroyed by grampuses or porpoises?—Great numbers.

Are there also a great number of seals?—A great number.

Do the seals remain throughout the year?—They do.

Are they also very destructive to the salmon?—Very.

Do you know that there were persons whose employment it was to kill the seals in the Tay?—I do.

Did those persons at one time receive premiums from the salmon fishers in the Tay, for destroying seals in that river?—Yes, from John Richardson and company.

Had you any particular opportunities of knowing the success of those persons?—I had.

State what those opportunities were, and what were the success of those persons?—There were two brothers of the name of Alexander and Thomas Boiter, whose premises were contiguous to mine, and I had frequent opportunities of seeing the number of seals which they had killed.

Can you state what number they generally destroyed in a year?—I could not state that exactly, but I know that they had no other livelihood in the summer seasons; they maintained themselves and their families by keeping up a boat and a net for that purpose.

Had you frequent opportunities of seeing the stomachs of the seals opened?—Yes, frequently, for they used to boil their oil near to my garden.

Did you often observe salmon in their stomachs?—Often.

Are there seals of considerable size?—Some of them are very large indeed; I remember one which they killed that was larger than a two years old stot. That was before I went to sea, I believe, but I am not quite certain of it; he took

took it up to Perth before he dissected it, and showed it to John Richardson and company.

Mr. Stewart Shepherd.

(May 31.)

Should you consider that if any plan could be devised for catching the seals in great numbers, that the value of their oil might defray that expense?—It might, but there is a good deal of expense in the first instance; but if proper attention were paid to it, in time it might pay.

Would it not be very much to the interest of the salmon fishers to contribute something towards the destruction of the seals?—Surely it would.

Are the grampuses of great size?—Of great size.

Of what size have you seen them?—I have seen them, I am convinced, from six to ten feet long; I have seen some of them very large.

Do the grampuses or porpoises, and the seals, frequent any particular parts of the Tay only, or are they at every part from the ocean upwards as far as the tide extends?—From the ocean upwards; they only fish with a flood tide up, they come down with the ebb and drive them all before them again.

How far up do they go?—I have seen them often up as high as Newburgh. I have likewise seen, when they have been in pursuit of the salmon, a salmon springing out before them, and the grampus or porpoise catch the salmon when he came down again in his mouth.

Do you consider that salmon compose the principal food of grampuses and seals?—I am convinced of it, and if they can get them they will not take any other.

Did you ever see any other fish than salmon taken from their stomachs?—Never.

Can you give the Committee any idea of the number of grampuses or porpoises, usually in the Tay in the fishing season?—I cannot exactly state; but I think, little better than two hundred of each, and more of seals than that. I am convinced that I have seen nearly two hundred grampuses at a time.

Did you ever count the number, or can you state the number on any particular banks?—I have attempted to count the number which I have sometimes seen on a bank; but I never could do it precisely.

Was it from their great number that you failed to accomplish this?—They lay very close at low water, in warm weather, after they have got their bellies full. They very often lie sleeping on some bank. They have then one or two watching, which never sleep. If they see a boat coming, a signal is given, and they all immediately go into the water; but whilst there, they generally lie so close, that it is difficult to count them.

Can you give to the Committee a general estimate of what may be supposed to be the number of salmon and grilse destroyed in the course of a year, in the Frith of Tay, by the grampuses or porpoises, and seals?—I should think that there are more destroyed by them, than ever were caught in the Tay in any one season.

Do you believe that each of those animals is in the habit of destroying several fish in each day?—I am convinced, if they could get them, most of them would do it.

Do you believe that they do not get them?—When the fish are scarce, they cannot get so many as they would destroy.

Do you consider that the destruction which they make may be a considerable cause of the decrease of the value of the fisheries?—I have not the least doubt but it must be so in part.

You formerly stated that you had been in the navy?—Yes.

Can you state whether the stake nets in the Frith of Tay, were useful in the navigation of the frith, or the reverse?—Very useful.

In what respects were they useful?—They were useful as they mark the channel, so that the shipmasters or seamen have only to take the bearings of those erections; and then at any time, either night or day (as the nights are not so dark during the summer months, but that they may distinguish them), they can go up and down the channel when they get the bearings of them, for they can see those erections between them and the horizon. They can, therefore, go up and down when they could neither see buoy or beacon.

Did the stake nets in the Tay, in point of fact, interrupt the navigation?—They did not.

What was the general opinion of seafaring men upon that subject?—I never heard one say but that they were very beneficial.

Have

Mr. Stewart Shepherd.

(May 31.)

Have you had occassion to be particularly acquainted with the management of boats on a coast?—Yes.

State what your opportunities were?—When I was on board a man of war, I was always employed in a boat, I was cockswain of a cutter; I was also employed in Sir Robert Calder's barge; I had also the command of a flat-bottomed boat, on the coast of France, at the Isle of Dieu, where I was employed in bringing off the army to the transports, and all the materiel of the army.

Does it consist with your knowledge, that the fishermen at the stake nets in the Tay became expert in the management of boats and small vessels?—I am of that opinion.

Does the nature of their employment train them to be expert boatmen?—It does.

Is the Committee to understand, that if stake nets were established generally along the coast, great numbers of persons would become expert in the management of boats and small vessels on the coast?—They would.

Were there a large number of persons employed at the stake net fisheries on the Tay?—A great number, both of men, women and children.

Has the employment of those persons ceased since the abolition of the stake net fishing in the Tay?—Of course.

Have you had occasion to observe the mode in which the salmon are taken out of the stake nets?—I have.

State the manner in which the salmon were taken, and afterwards disposed of?—They have a small hand net fixed upon a hoop, and that hoop fixed to the end of a pole six or seven feet long. They put down this net into the court, and draw up a fish, one or more, and then give it a knock on the head; and after they have taken them all out on the banks, they afterwards put them into the receiving boat; and whenever they have water, they are carried immediately to the ice-house.

Do you consider that, by those means, the fish were taken and managed so as to have them in the most perfect state of preservation?—Certainly; that is very clear.

Have you also had occasion to notice the manner in which salmon are taken and disposed of in the coble net fisheries?—Yes.

State the particulars?—Their net is drawn upon a hard beach; and when the salmon find themselves inclosed in the net, and come in contact with the hard beach, they flounce or leap about. Whenever the fisherman can, he wades in, and immediately attempts to kill them as fast as he can; this beating about must injure them, less or more.

Do you think, that they can be taken and killed, generally, with as little injury in the coble nets as in the stake nets?—Without there is a great quantity in the nets; but, generally, the stake net is superior in my opinion.

In the fisheries on the Tay, has any other mode of preservation been resorted to, excepting by means of the ice; is there any practice of partially boiling the fish?—There was at first; when stake nets were commenced on the Tay, they boiled a great deal.

Was that practice persisted in?—It was abandoned, in general, for the ice.

Is not the preservation of fish by ice more expensive than the other mode?—That I cannot state.

Do you mean the Committee to understand, that that is the most approved mode?—Yes; and the reason, I suppose, when they first commenced, why they generally boiled them was, because they had no ice-houses prepared.

Do you know what proportion of nets there are in the estuaries of the Tay, or any of the rivers that you are acquainted with, that are constructed to take the fish both ways?—Most of the flood nets have yards, or courts, both ways.

Have you seen any spawning beds in the river?—No; I cannot say that I saw them particularly. I saw them pointed out what they called so; but I cannot state it as a fact of my own knowledge.

Was your attention directed to that point by your instructions?—No, we had nothing to do with it.

You have stated, that you could not ascertain that the fry was seen near the sides of the river below a certain point?—I have.

The mode of ascertaining that, you say, was by a boat, and other apparatus?—Yes.

Do you not think it possible, that your boat and apparatus might have driven the

the fry to deep water?—No, I should not think so; for we kept in the middle of the frith when the wind went across the channel, and across the banks when the wind was going contrary to the tide. *Mr. Stewart. Shepherd.*

When you found the fry in the still water on the sides of the river, was your boat also there?—Yes; we went up the river always in a boat. (May 31.)

Then if the fry had been frightened and driven away by the boat, must not the same thing have happened in the shoal water?—Certainly, I think that effect must naturally follow.

George Little, Esq. called in; and Examined.

WHERE do you reside?—At Coleraine, in Ireland; my family reside there, but I have frequent occasion to reside at Annan in Scotland, and at our different fishing stations. *George Little, Esq.*

Have you had an extensive experience in the salmon fishery?—Very few more, I suppose.

Be so good as to state to the Committee how long you have been engaged in the salmon fishery?—Forty years.

The Committee will be glad if you would state to them at what rivers, friths, and stations on the sea coast you have had experience?—My first experience was in the Solway Frith, and in the rivers Annan, Nith and Esk in Dumfries-shire; the Dee, in the stewarty of Kirkcudbright, the Tweed, the Friths of Forth and Tay, and the sea coast, as far as the Speymouth; I have had experience on the river Lune, in the county of Lancaster, and on the Eden in Cumberland; in Ireland, in the river Bush, and the sea fishings at Bush and Perd Rush, in the county of Antrim, the river Bann, in the counties of Londonderry and Antrim; Loch Neagh fishing, in the counties of Derry, Antrim, Armagh and Tyrone; the fishings on the Foyle, in the counties of Londonderry, Donegal and Tyrone, in the Earn at Ballyshannon, in the counties of Donegal and Fermanagh; in the Bundorm, sea and river fishings in the county of Leitrim; the river Moy fishing at Ballina, in the counties of Mayo and Sligo, on the north coast of Ireland; the fishings in the river Shannon at Limerick, in the county of Clare and Limerick on the west side of Ireland, and the fishings at Passage on the river Barrow near Waterford, in the county of Waterford.

Do you wish the Committee to understand, that you have had personal experience in all those fisheries?—I have not attended in all those fisheries as a fisher, but I have had experience at the whole of them, either as proprietor or tenant.

Are you at present connected extensively with all or many of those fisheries?—With the whole of them, except the fishings on the Shannon at Limerick, the Lune at Lancashire, the Esk Dumfrieshire, the Eden in Cumberland, and Solway Frith; I am proprietor of a part of the fishing on the river Nith in Dumfries-shire, and the river Bush in Ireland, and of the others I am tenant only, along with my brother; and in some we purchase the salmon at a price.

Have you any objection to state to the Committee, the quantity of salmon which was produced during the last season, from your various fisheries?—I have none.

Be so good as to favour the Committee with as accurate and full a statement as you are enabled to make?—I have not my books in town, neither of our Irish or Scotch fisheries, but I have brought an account of the quantity of fish taken in our fisheries in the north of Ireland last season.

Have the goodness to state it?—The Bann fishing produced last year, fifty-two tons; the Port Rush fishery, about six tons; the Bush fishery, fifteen tons; Foyle fishery, fifty-one tons; the Moy fishery at Ballina, sixty-three tons; and we had from the Ballyshannon fishery, sixty-five tons.

Can you state to the Committee the progressive produce of those fisheries with which you are connected?—I can, and will furnish a statement to the Committee.

Can you favour the Committee with such a statement at present;—With respect to the Irish rivers on the north coast of Ireland, I can furnish such a statement, but not with respect to the Scotch rivers, and the other fisheries in Ireland, until I have access to my books.

[The following statement was delivered in, showing the progressive produce of certain Irish fisheries with which the witness has been connected, from the year 1808 to the year 1823 inclusive;]

George Little, Esq.

(May 31.)

AN ABSTRACT Statement of the Quantities of Salmon taken in Messrs. Little's

	Bann Fishery.				Port Rush Fishery.				Bush Fishery.				Foyle Fishery.			
	Tons.	*cwts.*	*qrs.*	*lbs.*	*Tons.*	*cwts.*	*qrs.*	*lbs.*	*Tons.*	*cwts.*	*qrs.*	*lbs.*	*Tons.*	*cwts.*	*qrs.*	*lbs.*
1808	76	1	–	17	18	2	3	10	16	5	3	7	37	1	3	13
1809	80	18	3	8	8	18	–	12	9	12	2	8	36	–	2	19
1810	67	12	2	2	13	4	2	20	10	15	–	27	42	17	1	–
1811	60	4	3	14	5	8	3	14	7	5	1	13	24	–	–	8
1812	65	8	–	21	8	17	1	26	8	13	1	23	48	4	1	1
1813	47	8	3	21	8	5	–	2	7	9	1	1	35	18	3	1
1814	68	4	2	27	12	15	3	26	20	18	–	19	46	1	2	27
1815	92	17	2	11	7	4	2	24	16	11	1	26	51	11	2	–
1816	87	11	3	24	5	2	3	19	12	–	–	4	44	1	–	24
1817	63	8	1	13	6	1	1	23	9	1	1	8	41	12	–	25
1818	70	2	3	3	3	12	–	17	12	19	3	23	44	13	–	–
1819	82	4	1	26	-	-	-	-	12	3	1	3	58	6	2	22
1820	42	16	2	24	7	9	2	14	6	6	2	18	47	5	6	–
1821	26	12	2	6	1	19	3	–	11	2	–	7	28	14	1	4
1822	31	17	–	22	5	4	–	12	8	15	–	9	57	–	3	8
1823	52	7	1	27	5	16	–	10	14	13	2	24	50	19	–	26

Will you be so good as to prepare, for the use of the Committee, as full a statement of the progressive produce of the fisheries with which you have been and are connected in Scotland and elsewhere, as you can?—I will furnish the Committee with a full statement hereafter.

Speaking generally, do you consider there has been of late a considerable decrease of the salmon fisheries of which you have had knowledge?—Generally there has been a very great decrease, but some have increased considerably.

What are the fisheries that have decreased?—All the fisheries except the Moy fishings at Ballina, and the fishings in the Foyle, which have increased.

Including Scotland and Ireland?—Yes.

To what causes do you attribute the exception of those fisheries, which you say have increased?—By affording better protection to the breeding fish; when we took the Moy fishings at Ballina in 1811, we purchased one half of the lease from Mr. West of Ballina; a Mr. Jones had the other half, who would not then part with it; and for some time previous to this, there was no protection afforded to the mother fish, because Mr. West and Mr. Jones were bad friends; and when we took it, Mr. Jones continued likewise to be averse to any expense in water-keeping, and we did not appoint any water-keepers. The quantity of fish that was taken in that fishery in the year 1811, was only six tons four hundred weight; we appointed some water-keepers in 1812; but as Mr. Jones would not pay his proportion of the expense, we gave it up. We continued with Mr. Jones to fish this fishing jointly until 1815, when we got a lease of Mr. Jones's half. We then immediately appointed water-keepers, and in the following year 1816, we got forty-two tons. We have since killed 100 tons in a season in that fishery, and the last season sixty-three ton, which, I consider, arises from the protection which has been of late years afforded to the mother fish. I consider that they had no protection for some years previous to the year 1816; by that protection, it has risen from six tons, to an average of sixty tons in a season.

You wish the Committee to understand, that that fishery, by your system of protection, has been raised to an average of ten times the produce that it was, when you took it?—Yes, nearly so.

Are there any of the other fisheries with which you are connected, where a similar increase has arisen from the same cause?—I mentioned, that I considered the Foyle river as having increased; it has not increased, however, nearly so much as the Moy at Ballina, for the Foyle was under good protection when we got it, and has continued to be protected.

Will you state to the Committee the system which you adopted, and which has been attended with such beneficial results?—By appointing water-keepers on the

George Little, Esq.

(May 31.)

Fisheries on the North-west Coast of Ireland, from 1808 to 1823 inclusive.

Ballina Fishery.				Bally Shannon Fishery.				Quantity shipped to Liverpool.				
Tons.	*cwts.*	*prs.*	*lbs.*	*Tons.*	*cwts.*	*qrs.*	*lbs.*	*Tons.*	*cwts.*	*qrs.*	*lbs.*	
-	-	-	-	-	-	-	-	100	11	3	7	
-	-	-	-	-	-	-	-	94	15	-	27	
-	-	-	-	-	-	-	-	90	1	-	12	
6	4	3	4	-	-	-	-	81	2	1	21	
16	-	2	3	-	-	-	-	94	16	2	9	
11	8	2	17	-	-	-	-	83	2	1	6	
19	7	2	1	-	-	-	-	129	2	3	18	
11	3	2	17	-	-	-	-	140	7	2	20	Port Kneen Fish; part of Port Rush Fishery not included this year.
42	4	2	16	-	-	-	-	128	3	-	27	D° not included.
46	16	-	16	-	-	-	-	108	9	-	27	
50	-	2	13	-	-	-	-	138	3	2	14	
110	6	3	10	-	-	-	-	172	-	1	24	Port Kneen fish not included.
55	12	1	15	52	6	2	3	186	6	1	6	
57	12		22	-	-	-	-	114	7	1	23	Port Kneen fish not included.
50	4	3	19	-	-	-	-	132	14	1	22	d° - - - d°
63	1	3	24	65	10	2	-	215	10	-	-	d° - - - d°
								25	-	-	-	To London, Bristol, Glasgow and Whitehaven.

the rivers, in the same way as gamekeepers; we place them at a certain distance, and give them salaries; the Moy cost us 340*l.* last year for keepers.

Will you state the duties which are performed by these keepers?—The duty is to watch the river at night, and to prevent any person from killing the mother fish, and protecting the fry during the season the fry are coming down the rivers; the rivers in Ireland which we have, generally belonged to one proprietor or tenant, and we find it our interest to protect them.

In the Moy fishery at Ballina, were you enabled by the united interest in the rivers, to carry this system of protection to a sufficient extent?—We are not able to do it so fully as we would wish; owing to the population of the country being much against the fisheries.

On what ground do you state, that the population is hostile?—Before we exported the salmon to England from those fisheries, they got their salmon very low, probably not more than three farthings or a penny, or three-halfpence a pound. Now that we export them to England, a salmon cannot be got there at those prices. It is on that account that the people there are generally against the fisheries; as they say, that the fish are all carried out of the country.

Have you any objection to state to the Committee the value of the salmon per pound on the spot, of late years?—I have no objection; in the spring months we generally obtain ten-pence a pound; that is during the months of February, March, April and May. In other months about sixpence, say June, July and August. Some we sell as low as three-pence. At some of the stations which are away from our icehouses, we cannot get so much for them; but in the return which the Committee has desired me to deliver in, I will give the average of the prices which we procure for the fish, as well in the English market, as at the fishery.

Can you state to the Committee in what places salmon spawn?—They spawn in the river; in my opinion, generally, where there are gravel beds, or fords in the river.

At what time of the year do roe and melt appear in the salmon, and at what time do the salmon become full and ready for spawning?—Roe and melt appear at all seasons of the year in the salmon, and they enlarge till we give over taking them,

But at what period do they become heavy with spawn?—In some rivers they are earlier than others; but in the months of August, September and October, in general, they get large in the belly and full of roe and melt.

At what time do the salmon leave the sea and ascend the rivers for the purpose of spawning?—They begin to ascend in the months of August and September, and continue to the end of the year.

Do salmon ever leave the sea and go up the rivers in the spring and summer months?—They do; when they leave the sea, at the beginning of the season, they

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they are generally taken; during all the spring and summer months they continue to visit the rivers from the sea.

Do all those fish, in your opinion, remain in the river until the proper spawning season, or do they go back again to the sea?—They would go back to the sea if they were allowed. I do not know any river but where they are all generally killed that enter the river early, but if they were not killed they would soon go back; I have known, in the Annan, salmon taken going down again into the sea. As soon as there is a little flood, after they have been some little time in the river, they would naturally return to the sea, after they had got rid of an insect by which they are infested, but of which the fresh water clears them.

Do salmon fall off in condition if they remain long in the fresh water?—They do, and very soon.

What do you believe to be the objects which induce the salmon to visit the rivers in the early part of the season?—It is instinct which induces them to return to the rivers, and, as I consider, for the purpose of getting rid of a vermin which gets upon them, called sea lice.

Do you conceive that they go in search of food on the banks of the river?—They may go for food; but I rather suppose it is more for the change of water, and to get clear of the vermin that fasten upon them in the sea.

If salmon remain long in fresh water, are they liable to have worms formed in their gills?—Yes, I have seen their gills entirely eaten off of them by the worms in fresh water; at least the thin and red parts entirely eat away.

Are salmon ever found in such a state, except those which have been recently in the fresh water?—I never saw them anywhere else; I do not believe they are ever found in that state except in the fresh water, and it is necessary for them to leave the fresh water to get clear of the vermin which fasten upon them while there.

Do you mean to state, that salmon which have been long in the sea, are infested by vermin, in consequence of which they proceed into the fresh water, and that if they remain long in the fresh water, they are infested by another species of vermin, which they seek to remedy by a return to the salt water?—Yes, I do.

At what season do the salmon deposit their spawn?—They generally commence in November, and continue spawning in December and January, that is in the winter months; in most rivers they do so.

Is it deposited in furrows, in the gravel of the bed of the rivers?—It is deposited in furrows amongst the gravel, but it is so covered again with the gravel that it is the same as an onion bed in a garden, being again covered over loosely by the gravel.

What becomes of the parent fish after spawning?—They remain a little time near the place, and then return again to the sea.

At what period is the parent fish found in the river after spawning?—That depends a good deal upon the season, whether it is a dry or wet season; if it is dry weather, they remain longer, but if it is wet weather they soon go down to the sea; in dry seasons I consider they remain longer in the fresh water than if there is a flood in the river to carry them down.

What names do you give to the fish after spawning, upon their return to the sea?—They are generally known by the name of kelts, and at some places kipper fish. What I consider as a *kelt*, is a fish that has spawned, and which is returning again to the sea. I have frequently looked at the salmon spawning.

Be so good to describe the process, as far as you have had the means of information?—I once observed two or three pair of salmon, at a short distance from my own house, on the river Bann; when they begin their bed first, it is like one furrow; they make a furrow in the shallow part or current of the water, where they begin to deposit their spawn, and they continue working against the stream, until they have formed a bed of perhaps 12 feet by 8 or 10.

Do you mean for one pair of salmon?—Yes, for one pair of salmon; in the instance I was alluding to, when I saw these salmon first, the bed was very little, but it increased every day; I observed the salmon to go very leisurely down the side of the bed, and go just round where they have thrown up the gravel, and come back to the same point next to the stream; as soon as they come up to this place, they threw themselves on their sides, and worked one against the other, at the same time rubbing their noses against the gravel, till they

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came to the other corner of the bed, and then they fell leisurely round until they came to the same place again, at the top of the bed next the stream, where they went through the same process; they continued in this way for many days, working, and if it so happened that they were frightened, they would run away and in a little time return to it again.

They continued working till they completed the bed which you have mentioned?—Yes.

Does the description which you have now given, complete the process of spawning, as far as you have had an opportunity of observing it?—Yes; but it takes them some considerable time before they get all their spawn deposited; several days; and I have known them, when they have been frightened away, go and leave their spawning beds, and begin at other places.

After the spawn is deposited, does the parent fish cover up the bed with gravel?—The bed is covered as they go along.

Is that done by the male or female fish, or by both?—Both assist in it, and while in the act of depositing the spawn.

Is the head of the male peculiarly formed, so as to be fitted for that purpose?—It becomes so at that season of the year; the fish gets a very long hard bill on his under jaw.

Both male and female?—No, only the male; and I have known the under beak get so long, that it sometimes drowns the fish; it gets through the upper jaw, through the skin of the head, and the fish then drowns. We frequently found them lying dead upon the shore, with the beak through the upper jaw.

Does the size of the beak decrease again as the spawning season passes?—It does.

At what time do the young fish rise from the gravel, and come into life?—A great deal of that depends upon the season at the time of the year; whether we have an early spring or not; sometimes there may be two or three weeks difference, according to the season; they remain in that gravel bed until some natural warmth comes into the river in the spring of the year. I have observed, when we have early warm weather, the fry come early, and when we have a late spring, it is later before the fry rise from the gravel bed; of course a great deal depends upon the season, but generally they begin to rise about the beginning of March, and they end about the middle of April, in rising from the bed.

Can you state the appearance of the spawning beds previously to the young fry being detached from the gravel, and getting into motion?—I never saw them in that state, but I have often conversed with our water-keepers on the subject who are placed upon the upper branches of the rivers, and they describe them very much in the same way that Mr. William Scott did when he was examined in the Tay cause; that they rise from these gravel beds like a crop of oats or thick briard of grain, rushing up all round the stones in very great numbers. The tail comes up first, and they will come from these beds with a part of the pea about their heads. I never saw it myself, but my information has been derived from water-keepers attending to them on the spot.

Who are people that have attended to that particular subject?—Yes, they have every chance of seeing it from their situation, and their business being to protect them.

Can you describe to the Committee the progress of the fry down the rivers?—As they gain strength when they first come out of the gravel beds, they keep in the eddy pools till they gain more strength, and then they go down the rivers; and we can see them very plain coming down all the rivers at a certain season of the year in great quantities, proceeding on their way till they meet with the salt water, when they disappear.

In the parts of the rivers where the water is fresh and shallow on the sides, do you imagine that they keep near the sides, or in the middle stream?—They generally keep near the sides, at least I have so seen them. I have seen them in great quantities at the sides, they might be in the stream too, but I have seen them coming down in large quantities by the sides.

Have you any knowledge of the number of the ovæ in the roe of a salmon?—I never have counted them myself, but a brother of mine who is now dead, counted them, and I have seen it in his handwriting. He averaged the salmon at seventeen thousand, and the grilse at ten thousand five hundred.

Do you believe that each of those ovæ produces a young fish, if it does not meet with injury?—Yes, providing the mother fish has a male along with her

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at the time she deposits them. They may be covered too deep, or many accidents may occur before they become perfect fish; but my opinion is, that every one of them would turn into a fish, provided no accident or injury should prevent it.

Are you acquainted with a fish known by different names in different rivers, called hirlings, or whiteings, or finnocks?—Yes, I know the fish by all those names.

You consider it to be the same fish going by a different name in different places?—I do.

Are they equally plentiful in all the rivers with which you are acquainted?—We never see such a fish in Ireland, in the rivers we are concerned with.

Where are they found in abundance?—In the rivers that run into the Solway Frith, and in the Tweed, and in some other rivers they are found; but in a great number of rivers they are not. They are only found in those rivers where they breed.

Are they found in great numbers in the Tay?—There are a few in the river Tay, I believe, but they are not plentiful, only a very few; I never saw any there myself.

Can you describe what sort of fish it is?—It is a fish which has the appearance and shape of a salmon or trout.

Of what age?—We do not see a salmon of that age, it is only shaped and headed and tailed like a salmon.

What is its length and colour?—They are from twelve to fifteen inches in length.

Is the fish white or red?—Some of them will cut up red, but they are mostly white.

From what you have said, it is to be inferred that you decidedly think it is not a salmon?—Decidedly I think it is not.

What are your reasons for entertaining that opinion?—My reason is, that we only find them in rivers where they breed; we freqently do not find them in rivers where salmon are; there are many rivers where there are salmon, where no such fish are known; we see them going down kelt in the same way as we see a large salmon going down after spawning; and not being found in every river where salmon are to be found, it is impossible to conclude that they can be the same fish as the salmon.

Do you consider that they return to the rivers, as the salmon do, for the purpose of spawning?—They do; they return for the very same purposes, and at a certain season of the year.

Do they follow similar habits to the salmon?—Yes, in the rivers where they are found they do.

Do you conceive that it ever grows to a size above that which you have stated?—No, I do not think that it does; I believe when it attains that size it is at its full growth.

Have you ever had an opportunity of observing the fry of that fish?—No, not to distinguish it.

Do you believe it to be of a size equal to the salmon?—I should suppose they are considerably less.

Do salmon fry go to the sea of various sizes, or are they pretty much of the same size?—Those which go down the latest are generally larger than those which go down first.

Do you conceive that the fry of the hirling may go down among the salmon fry, without being necessarily distinguishable?—Quite so.

Do you consider the grilse to be a salmon, or a different species of fish?—There is a great difference of opinion upon that subject, but I think it is a different kind of fish.

State your reasons for that opinion?—We do not find in some rivers the same proportion of grilses as salmon, as we do in others; for instance, in our fishing at the Foyle, it consists almost entirely of grilse; for out of the quantity stated to be derived from that fishery, we perhaps shall not have a ton of large salmon, our average weight being not more than about five pounds and a half.

Do you not believe that those fish, if not taken, would grow in size equal to a salmon?—No, I think they would not; salmon do not breed up those rivers to any extent; we kill, no doubt, young salmon as grilses, without paying any attention whether they are so or not; but I consider the two species not to be

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the same fish; I likewise find, that in many rivers there are a peculiar kind of salmon attached to them, which return to them regularly. *George Little, Esq.*

Then you mean to state, that those grilses go up loaded with spawn, and come down kelts, in the same way as the salmon do?—In the very same way. (May 31.)

You state this from your personal observation and knowledge?—Yes, perfectly.

Are grilse to be distinguished from salmon by any other characteristics than their apparent weight and size?—They are different in shape.

State the difference to the Committee?—They have a smaller head, sharper and not so full behind the head as the salmon is; and towards the tail they are smaller, and their tail is much more swallowed tail than the tail of the salmon is.

Is the snout of the grilse sharper?—Yes, it is; they are smaller headed and a little longer in proportion: those who are fishermen can easily distinguish the one from the other.

Is it possible to distinguish a grilse of one year old from one of two years?—I consider that what we call the fry that go down in the early part of the season, if they are allowed to go down to the sea they return the same year; and that we kill them from three to nine and ten pounds weight.

Are you acquainted with the grilse of a year old?—Only from the size.

Are they nearly of one size?—No; when we first get them they are about two pounds weight. The grilses do not in general set in till nearly the middle of June, but last year they came about the middle of May, and we took a great many of two pounds and two pounds and a half weight, but if they set in about June we get them of about three pounds, and they continue every week to increase in size about half a pound.

How do you account for salmon being found of different sizes and ages, whereas you find the grilse never exceeds a certain size?—I believe it never exceeds nine or ten pounds weight, but we find salmon not nine pounds weight. The largest salmon that I know of is in the Shannon river; they grow there to a great size, but it is a particular kind of salmon that is bred in that river. In the Bush fishery, though an early fishery, the salmon are quite of a different shape, and smaller than what they are either in the Bann or in the Shannon.

Can you distinguish a grilse of two years old from one of three, four or five years old?—No; that is impossible.

Can you distinguish a salmon of two years old from one of three or four or five years old?—No, I do not know that any person can; I believe few are allowed to live to the age of four or five years.

Martis, 1° *die Junij*, 1824.

WILLIAM ROBERT KEITH DOUGLAS, ESQUIRE,

IN THE CHAIR.

George Little, Esquire, again called in; and Examined.

YOU have already stated that you consider the hirling and grilse different fish from the salmon, do you also consider what is called the sea trout to be a different fish?—I do. *George Little, Esq.* (June 1.)

State your reasons for this opinion?—The same as for the hirling; they are only found in particular rivers where they breed; they are not found in all salmon rivers. We do not see any thing like the Spey trout, or like the trout that is caught in the Solway frith, or like the trout that is caught in the Tweed, in any of our fishings in Ireland. They do not breed, nor are they to be seen there.

You consider that if they were young salmon they must frequent every salmon river?—I consider they would be found where salmon are found.

Can you give the Committee any information as to the growth of the salmon?—I consider the growth very rapid, more so than is generally imagined, for

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for I consider that we kill the grilse the same season in which they go down fry from the fresh water; and that we also kill young salmon in the same year in which they go down fry.

The grilse is the young salmon?—I conceive not; I have said so before. In some rivers we do not get the same proportion of salmon that we do of grilse, nor the same proportion of grilse as of salmon. My reason for thinking we kill them the same year that they go down from the river is, that when they begin to return they are generally under three pound weight; two and a half and two pound weight; and they increase gradually every week, during the time we kill them; and we find that is the case in all rivers that I know.

At the end of the fishing season, what size do you consider a fish of that year may come to?—Seven, eight or nine pounds. We seldom have grilses in the Bann river, at Coleraine, before the month of June; but last year they returned very early to us; we took several in the month of May, and put them out of our nets, they were so small; about a pound and a half, and two pound weight.

How do you account for grilses not appearing in the rivers at all seasons as salmon do?—We have them at all seasons in the Foyle, which I formerly spoke of, but they are later than salmon in setting into the rivers; but we do not get many fish in the Foyle of any kind till the end of May, and it will scarcely pay for employing fishermen to fish it, till the end of May

Do grilses in point of fact, ascend rivers at all seasons as salmon do?—I do not think that they do in the early months.

How do you account for that?—The same as you account for one fishing being an early fishing and another fishing being a late fishing. In some fishings we can get a great quantity of fish in the month of January, and in others we cannot get a salmon. It is the same with the trout, they only appear in certain months of the year, even in those rivers they frequent.

The Committee understand you to say, that grilses set in, in the same rivers, earlier than salmon?—The young grilses do set in earlier than the young salmon.

Then how do you account for the young grilses setting in earlier than the salmon?—That is not very easily accounted for; but it is certain, that at that season of the year they do return to the rivers, and some young salmon are amongst them no doubt; but in these rivers that I speak of, the distinction is quite visible between the grilses and the salmon. Very few salmon visit the Foyle, and seldom large salmon breed in it. I believe that every river has a peculiar kind of fish attached to it, both as to salmon and grilse. We have three fishings that fall all into one bay, in Ireland, the Bush, the Bann and the Foyle, and we can easily distinguish the fish of all the different rivers when we take them. The salmon in the Bush, is a long-bodied round salmon, nearly as thick at the head as he is at the middle. The salmon that we kill at the Bann, is what I call a very neat made fish, very broad at the shoulders, and the back fin tapering away towards the tail, and quite a different shaped fish from the Bush fish. The Foyle is a river that we seldom get any large salmon in. They are mostly all grilse we take in that river.

What do you call the bay you have mentioned?—It is the bay formed between Innishowen Head and the Giant's Causeway. The fish that we killed in the Shannon were a great deal larger than any of those; few of them under twenty pounds weight, and many of them thirty-five, forty and upwards.

Are you acquainted with any experiments that have been made, by marking fish one year, so that they may be known when they return afterwards in a different shape?—When I was attending the Lune fishery at Lancaster, I was told, by a fisherman of Mr. Brockbank's, that they marked some of the fry going down, and that they killed them the following spring, full grown salmon, both there and at the mouth of the river, in the sea.

Do you know any thing of grilses being marked in the same way?—If you marked fry it would be very difficult to say, whether you marked the fry of grilses or the fry of salmon.

Do you know any thing of grown grilses having been marked in that way and having returned again as grilses or as salmon?—No, I have not. The person that I purchased the fishings from at Dumfries told me, that he, one year, marked a great number of kelts salmon, and they returned to him again that season in full condition going up the river to breed.

As salmon full of spawn?—Yes.

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Are you acquainted with a small fish, called parr, found in salmon rivers?—I have seen them, but I consider them merely a fresh water fish, or a species of fish by themselves, not at all connected with the salmon.

Have you ever known roe found in any of them?—I never examined them.

Have you ever known them found in any river where there was no salmon?—I do not know that I have, I never took particular notice as to them, but I consider them a fresh water fish, unconnected with our salmon fisheries altogether.

Have you observed them in the river at all seasons?—I cannot say that I have. A question was put to me yesterday, about the age of the salmon; I consider that no person can tell the age of a salmon, because salmon will grow bigger or larger according to the stock from which he is bred. If he be bred from a large salmon, he will grow a large salmon; but if he be bred from a small salmon, he will never be a large salmon; for instance, I believe the salmon that is bred in the Bush never get much larger than nine or ten pounds weight, and those will never grow large, in my opinion; they never will grow large salmon, though they live to any age.

They never will grow to the size of a Shannon fish?—No.

Is there any thing to be learned of the age of a salmon from a section of the back bone or the spine?—I do not know that there is.

Do you think that after the female salmon deposits its roe, the male grilse could impregnate that roe?—No question of it. Our water-keepers tell me that they very seldom see a salmon and grilse breeding together, but they have seen it occasionally, but not generally; very seldom.

Have you ever seen salmon taken smaller than the grilses are taken?—Yes.

You have spoken of the different breeds of fish; do you know the fish of the river Shin in Sutherland?—No; I never was farther north than the Spey.

Will you state to the Committee the various modes of fishing which have been or are now in use in the various rivers, friths, estuaries and stations on the sea coast with which you are acquainted?—In the Solway they use the stake net, the pock net, the halve net, and the hang net; and there is also a mode of fishing by spears or leasters practised; they sometime fish on horseback with those spears. In the Annan the draught net is used; that is, the net and coble. It is called net and coble, but it is not properly a coble, but a different sort of boat which is used, a boat called trows. The syling net is used also in the Annan. There used to be stell nets used in the Annan; but the court found them illegal, and they have been discontinued. In the river Nith there are cruives, draught nets and halve nets; and stake nets were lately introduced also. They did use the syling net, but that has been given up. The same modes of fishing are used in the Dee, in the stewartry of Kirkcudbright, that are in the Nith, with the addition of stage nets. In the river Esk the same modes are used as in the river Annan, which I have mentioned. In the Lune, at Lancaster, there are stake nets, yair nets, cruives, halve nets, and draught nets. In the river Bush the fishing is by cruives and the draught net without a boat. On the coast opposite to the mouth of the Bush, they fish in the sea by what is called in Scotland toot nets; a man stands in the boat and sees the fish off the coast, and then he hauls them. In the river Foyle it is by draught nets and stell nets, which we set to kill fish going up and down the rivers and lakes, and by the net and coble; we did introduce stake nets there, but the marauders, or the people who had no right to fish, came and cut them down, and we have not attempted to erect them lately. The Bann fishery is by cruives and by nets stretched across the river, and drawn occasionally with large boats. I do not know whether it may be called a net and coble, or a draught net, for it is so large we generally require fourteen or fifteen men to draw them. In the Earn, in Ireland, it is fished just the same as the Bann; and the Moy, at Ballina, is also fished by cruives and stell nets and draught nets. In the Limerick fishings we have the weir; it is made of wicker or basket work, and stands across the river, and there is a place for the salmon to go into it; it is the same, in fact, as a cruive: the stake nets have been introduced there. The fishery at Waterford is fished by stake nets, stage nets, and by two boats with nets fixed between them, in the deep parts of the river.

State what are the modes of fishing in the Tay and the Forth?—In the Tay there is the net and coble; there are what they call pock nets, or pot nets, or crays, the same as have been found to be illegal and prohibited in the

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Annan, set in great numbers across the channel in the upper parts of the Tay; they are what we would call in the Solway hang nets; they are attached to a quantity of stones. In the lower part of the river it is now fished by what is called toot nets, or net and coble. There formerly were stage nets. That was the old mode of fishing in the Tay, but when the stake nets were introduced into the Tay, the stage nets were abandoned for the stake nets as a better mode of fishing; and when the stake nets were found to be illegal, the stage nets were not allowed to be erected again.

You do not mean that the stake net and the toot net are the same?—No, they are different. The toot net is the net and coble not drawn till the man in the boat sees the salmon, when, and not sooner, he runs his net on the shore.

You have stated that the stage net was in use in the Tay previous to the use of stake nets?—It was.

How long do you consider that the stage nets were used in the Tay?—I dare say from time immemorial; but they were all abandoned for stake nets.

Does the law now prohibit the proprietors of the fisheries on the Frith of Tay from erecting stage nets?—It does.

Which had previously been used time out of mind?—They had. There is not a fixture of any kind now allowed in the frith; they would not even allow the fishers in the frith to make a place for hauling the nets ashore. In the Forth there are stake-nets, pock nets, and the net and coble.

In the different rivers and estuaries and sea fishings you have mentioned, at what period are the salmon in the greatest perfection, and in the greatest numbers; what seasons of the year?—In the month of May I consider they are as good and as perfect as at any one season of the year; they are in the greatest quantity in the months of June and July; in August they begin to fall off in some rivers, in some rivers not; they are very plentiful in some rivers in August and September. The nearer the salmon comes to be in the state for spawning, she is in the worse condition; that is, from the month of May they are gradually growing worse till they begin to deposit their spawn in the month of November, when they generally begin to spawn; but the close time, in my opinion, ought to be different in different rivers; there are some rivers in which you will get some good salmon all the year round, and in others you will not.

You have stated, that in general in those rivers and fisheries with which you are acquainted, the salmon are in the greatest perfection in the month of May; does that generally apply, or are there any exceptions to that rule in any particular rivers?—Yes; respecting the river Shannon, the salmon fishery is there nearly over by the middle of May, and the salmon in that river are in the greatest perfection in the months of February, March and April; the salmon that we kill in the river Bush, in the early part of the season, are better than they are afterwards.

What do you call the early part of the season?—In the months of February, March and April.

State any exceptions in the rivers in Scotland to what you have generally mentioned?—The Solway Frith and the rivers Annan, Esk and Nith, are all nearly the same, and fall under my general remark; but the river Dee, which is adjacent to them, is a full month more early, and the salmon that are caught in it are in bad condition nearly a month sooner than the other rivers; they are full-bellied, and in worse condition.

Then the fishery in that river, in your opinion, ought to commence earlier than in the other rivers.

It is an earlier river, and it ought to shut sooner and commence sooner; the fisheries that I have seen in Scotland I consider are greatly injured by the season at which they commence and leave off fishing; the law at present allows the fishery to commence on St. Andrew's day, which is far too early, and allows the fishery to continue till the 26th of August; I think, speaking of the habits of the fish, that the seasons are later than they have been when the old laws were made. To commence at the season of the year allowed by law in Scotland, destroys all the mother fish. The fish are in great abundance, breeding in the rivers when the fishery begins. It is my opinion that they should not commence fishing so early, and that they should fish a little later; that would still leave plenty of stock to supply the river with breeding fish. In a survey that I made of the upper parts of the Tay, I ascertained that the destruction there

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was dreadful in the winter season, and that the tenants or proprietors of fisheries encouraged their men to kill them by making them a perquisite of their own; there were two or three people in Perth that had no other mode of support than by the selling of these foul fish; I found it to be the same case nearly on a survey that I made of the Tweed river. Upon that survey I went down the Tweed, and I was told at Peebles, that they never began fishing at these upper parts till they had given over at Berwick, and then they began to fish above. I found that there is a most extensive and destructive fishery carried on in the close time at the very places where the fish are spawning; I have observed oftener than once, in travelling to Edinburgh in a coach, along these parts of the Tweed, 17 and 18 taken out of one pool, long after the close time had begun.

Were those fish in bad condition?—In very bad condition.

Do you think them wholesome or unwholesome food?—I consider them very unwholesome.

When does the fish deposit her spawn, and the spawn come into life, and proceed to the sea, in the different rivers you have mentioned?—I think I have answered that yesterday.

In the different rivers with which you are acquainted, at what season of the year does the salmon fry begin to go down to the sea?—There is not a great difference in the fry going down to the sea, as to the taking of salmon, although it be an early or late river. When the natural warmth comes into the water in the month of March the fry generally rise, and they continue going down from that time until the 1st of May; sometimes I have seen them going down till the month of June; I have seen some of them in the month of June, but they principally are out of the river early in May.

Do you consider that any of the modes of fishing which you have described, are injurious to the spawn and the fry of the fish?—Not if they are not allowed to fish in close time, excepting the nets that travel over the beds where the salmon is deposited If they are allowed to kill fish in the breeding season, then they are all injurious; but if they are not allowed to kill fish in the breeding season, or too soon after it, none are destructive; but nets that travel over the fords where the salmon spawn is deposited, these must be destructive to the beds of spawn and to the fry. In our fishings, where we fish with draught nets, in Ireland, we never use such nets before the middle of May; indeed we never use them except where the tide comes, and then there are no spawn. Our modes of fishing are by cruives, and by these draught nets in summer, when the waters get low, so that the salmon do not come up the fresh water of the rivers. We do not draw any nets over the beds where the spawn is. In the Annan and the Nith and the Dee, the rivers in Dumfrieshire, they do not draw the nets over the spawning beds, they only fish in the pools, and draw them to shore opposite the pools, keeping away from the fords. In these rivers they fish differently from what they do in the Tay.

State how they fish in the Tay?—There are so many different proprietors in the Tay, that, while the fish are passing them, they are obliged to fish upon the fords, otherwise they would miss them, and accordingly they fish over the fords as well as into the pools; by fishing upon these fords I consider that it must be injurious to the spawn and the young salmon, which are deposited and rising up among the gravel.

Do they not begin to fish in the Tay in the manner you have just described, upon the shallows and the fords, long before the spawn comes into life?—Yes; the spawn does not come into life, I consider, till March.

And when do they begin now in the Tay?—On the 10th of December.

Then, in your opinion, do these nets, so dragged over the shallows, injure seriously the breeding of the fish in the river?—I consider that anything which disturbs the spawn after it is deposited does so.

Are the nets generally of such power as to disturb the bed of the gravel which covers the spawn?—You must have them sunk and kept close to the bottom, or else you cannot fish.

State to the Committee the time when the salmon fishery commences, and when it ceases in the various rivers, friths, estuaries, and stations on the sea coast with which you are acquainted.—The Solway frith and the Annan, the Esk and the Nith rivers commence on the 12th of March and give over on the 26th of September The Eden, which falls into the Solway frith, commences on the

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1st of January, and it ends at the same time that the others do. The Dee commences on the 2d of February, and it ends at the same time time the others do. There was a particular Act of Parliament got in 1804 for regulating those fisheries falling into the Solway frith. In Ireland, the Bann and the Bush are allowed by law to commence on the 1st of January; in the Bush we do commence at that time, but in the Bann we never commence till the latter end of March or April; they close both on the 12th of August. In the Foyle, the law allows us, I believe, to commence in February, and to fish till the 1st of September, but we never commence until the middle of March or until April. In the Earne, it is the 1st of February and the 12th of August, but we do not actually begin in the Earne until May. In the Moy, at Ballina, the law is the same, and we begin in February. At Limerick it is the same; and at Waterford the law is the same, but there is no attention paid to the close time at all in that river, and some good fish are got all the year round. The general law for Ireland, where there is not an exception, is to close on the 12th of August and to commence mostly, I believe, in February. I consider that some of the best fisheries in the kingdom are entirely ruined for the want of attention to the close time. The Dublin market is just as regularly supplied with salmon during the close season as it is at any season of the year. There is no attention whatever paid in many parts to the breeding salmon.

State your opinion when the fisheries should commence and leave off in the different rivers you have mentioned; begin with the Solway?—I am not an advocate for late fishing, though I think that a great many fisheries might fish later than they do, and I would make a difference in the time of commencing. Some think that a general law might be better; but I would make a little change.

State your view of the subject, beginning with the Solway?—The Solway, the Dee and the Eden, might properly commence about the 2d of February; the Annan, the Nith and the Esk ought not to commence till very late in March. Last season my tenant commenced fishing at my fishery in the Nith on the 11th of March. He then killed, as I am informed, upwards of 200 salmon, some of them positively not spawned. I consider that it was owing to the protection that was afforded to the river Nith at the time, that there were so many fish within his reach. If there had not been protection during the close time, there would not have been one of those fish in the river; they would all have been taken away before that time. But protection in close time is of no value if the fishery commences so soon that the spawning fish are taken before they have spawned.

When do you think the fishing ought to leave off?—They should not fish later, in any of those rivers, than the 1st of October. I have conversed with several fishers in that neighbourhood with respect to the time, and they generally agree that it should be later; and I think the Committee will see, in the returns that were made to them, that they carry the time down to the 10th, and some of them to the 20th of October; but, in my opinion, it ought to end early in October. I consider that the Tweed has been injured by the new law, which carried down the fishing till the 10th of October.

State when you think it ought to commence and to end in each river, and your reasons for it?—My reason, with respect to the Tweed, is, that there is not a sufficiency of mother salmon left to fill the river, if they fish to that late period. It would be much better that the fishings should not commence in any river till the fry is out; but I do not know but that would be too late in some of them; for in the month of February, in some rivers, there is a great quantity of fish in excellent condition.

When ought it to commence and end in the Tweed?—I am not so certain as to the Tweed when it should commence, as that I think it should end earlier than it does.

Go on with respect to the other rivers?—The best way of ascertaining the proper season for each river, would be to ascertain the quantity of salmon that come to market from the different rivers to London, in the early months of the year. You would then see the produce of the fishing at these early months. The quantities that are taken, are, I believe, very trifling during the early months in which they fish in some of the rivers. Although there are some very early rivers in which I think the fishery might properly be allowed in the beginning of February, yet, if a general rule were to be applied, I think that none

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none of them should commence till the month of March, to give time to the breeding fish to be fully spawned, and to the kelts to go down the river. Some regulations ought to be established to give protection to the spawn and the fry. The fishing ought to end at such a time as would secure to the river a sufficient stock of breeding fish.

In general, the Committee is to understand that your opinion is, that in almost all rivers, they commence too early, and leave off too late?—No; in some of the rivers they do not leave off too late. They give over too soon in some rivers; for instance, the Tay gives over on the 26th of August. If the river was well protected, you would get a great abundance of salmon later than that, and would leave a great sufficiency to stock the river.

State when you consider the fishery of the Tay should commence?—It might commence early in March; the spawning would be over, and the greater part of the kelts would be gone down. The fry would then be getting out of the beds. If they would only fish in the pools, they might commence even earlier; but they ought not to be allowed to fish upon the spawning beds till the fry is up. The Tay might be fished till some time in September. That would leave plenty to stock the river.

Mention your opinion with respect to the Spey?—I cannot speak as to the Spey; I never was on the Spey but just once.

Can you say any thing as to the Forth?—The Forth ought to be much the same as the Tay; I never was much upon the Forth above the Pow of Alloa. We had some stake nets upon the Forth, and I believe there are some still.

You stated yesterday, that, with some exceptions, there has been a general decrease in the salmon fishery in the rivers throughout the kingdom; state now to the Committee the causes to which you assign that decrease?—I assign it principally to the non-protection of the mother fish; in the first place, allowing the mother fish to be destroyed; and in the next, allowing the fry to be destroyed in going down the river. The present law is not sufficient to protect them; the penalty in which any person can be fined is a mere trifle when compared with the profits. He can go out in the night, and take 20*l.* or 30*l.* worth of salmon. He cares nothing for paying the penalty. Many of these marauders will go and take 50 or 60 salmon in a night. They are easiest taken when they are upon the breeding ground; and it is absurd to say, that for this a man shall be fined a sum bearing no comparison to what he gains. The law is not sufficient to protect the breeding fish.

You have stated, that you consider the destruction of breeding fish and fry in the river, is the principal cause of the decrease of salmon; is there no other reason for the decrease of salmon, particularly in the river Tay?—I do not know of any.

Is there not destruction upon the spawning beds?—That is the destruction of the fry which I speak of; the increased value of salmon is a great encouragement to kill them.

In the rivers you are acquainted with in England, and in some parts of Scotland, is not the erection of machinery, and the pollution of the water by bleaching acid and other things, detrimental to the breeding of fish?—They are; several rivers in England have been destroyed altogether by it; in some parts in Scotland too this has happened in some degree, particularly in the Clyde; they say, that liming the land has been very destructive to the fisheries. My own opinion is, that lime may be destructive if it is washed off the ground immediately, and goes into the river, but not otherwise. I consider that the draining of the land in Scotland has been as injurious to the fishings as the liming of it. Formerly the small waters, in consequence of the rains remaining long in the land, and in the marshes, were a length of time in rising and falling; now they get up very rapidly, and fall very rapidly; the salmon, when they go up those little rivers to breed, deposit the spawn, and at a season of the year when the spawn ought to rise from the gravel, it is left dry; there is thus a loss to the fishery by the beds being left quite dry, and no water to bring them to life at the proper season. I have said, that the value of salmon is an encouragement, because formerly they could get very little price for the fish, and it was no object to the poachers to catch it; since the fish have been sent regularly to the London market from Scotland, and other places, salmon has become of great value even close to the fisheries. The general establishment of coaches over the kingdom has likewise aided in raising the price of salmon; formerly we could only eat salmon at a fishery, where the salmon was caught; but now there is

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not a town in England, in which you cannot have fish as regularly as you can have it at any fishery in the kingdom; thus, the coaches running over the kingdom have added very materially to the increase of the value of salmon, and it is an object now for a man to go at night and get himself wet, in order to get a salmon; a salmon is of some value, and killing forty or fifty salmon is a considerable sum to a poor man, and to be fined only the stated penalty is nothing at all. The mill cauls are very destructive both to the breeding fish, and to the fry coming down; I know in Ireland people go out at the back of the cauls, and sit there and watch till they see the salmon attempting to go over, and then they go and kill them; in many places they set little nets at the back of the caul; when the salmon does not get over the caul, he falls back into the net and is taken, and the back of the caul is a particular place which poachers go to fish. Many of the mills have little places to catch the salmon as they go up, like a little cruive; they are very destructive to the fry when they come down the river; they take amazing quantities as the fry go down; in the dry seasons, when the waters are little, there is no other way for the fry to get down the little rivers than by going down the mill lead; in fact, they can take all the fry that there are in the river at those mills; I have seen the water black in these mill-leads with fry, seeking down to the sea; and have heard, and do not doubt it, although I never saw it myself, that the millers often take the fry, and feed their pigs with them; I know that they take the fry in Ireland, and cure them like herrings; I know that this is done in different places; in Ireland the eel fishery is very hurtful to the salmon fisheries. The eels are caught by weirs, set in the river for taking the eels going down to the sea; the eel weirs are made of stake and wicker work, drawn together towards the centre, and the net, which is like a bag, is hung at the centre; the proper season of the eel fishery is in the months of September, October and November, when the eels are going down to the sea to spawn; but those who have eel weirs place their nets in the river at the time the salmon fry are going down; they do this under the pretence of catching eels, but really to catch the salmon fry, which they catch and salt in some places in great quantities. The eel fishers ought not to be allowed to fish at those stations during the months that the fry are going down; if they are allowed to hang the net at this period, they can take the fry going down in great abundance; I took an eel fishing in the river Moy, in order to protect the fry when coming down; and my information was, that they took great quantities of them and salted them, and stored them up for their use. Now, the eel fishery is not productive in those months; it would be no loss to the eel fishery to prevent this fishing in those months, and there ought to be a penalty by law to prevent the eel cochles or nets being set in the weirs in those months. In the lakes there is very great destruction sometimes, in Ireland, by fishing at the foot of the little rivers that fall into the lake; for instance, the Bann runs out of Loch Neagh, and the salmon going up to breed run into Loch Neagh; they go through the lake into all the tributary streams that fall into that lake. There is no outlet from Loch Neagh except the Bann, although there are a great number of rivers that discharge themselves into Loch Neagh, and these rivers are the best rivers for the breeding of salmon; we consider them as the principal breeding places for the Bann. There are people that go to the foot of those rivers at the season of the year that the fry are coming down, and with little narrow-meshed nets, under pretence of fishing in the lake for fresh water fish, they draw on shore great quantities of the fry at the mouths of those rivers; no nets should be allowed to be used in such places under a certain size, particularly at that season when the fry are coming down. The boats that are in use upon that lake, and upon the Earn lake in Ireland, ought to be registered the same as is at present required in the Bann. Any man keeping a boat upon the Bann is bound by law to have a register, and give security that he shall not use them in the fishery; that law should be extended to all persons keeping boats upon rivers; they should give security that they should not use them in fishing. We have found in Ireland difficulties, as I mentioned yesterday, in protecting the fisheries; that magistrates are either unwilling to act under the present laws, or do not understand them sufficiently. There are so many different statutes, that it would be much better for the magistrate, and he could act with more propriety, and it would also give a great facility to the fishers, were the laws respecting the fishings consolidated, and brought into one general Act, which he could peruse.

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You are speaking of the laws of Ireland?—Yes; but I think the same observations apply to the laws in Scotland; there are several statutes respecting different places, that would be much better if they were consolidated.

You have stated, that a great quantity of the fry is destroyed by the mill races; what remedy would you recommend to be applied for this evil?—In the mill dike there ought to be a place for the fish going up to spawn, and also for the fish after spawning, and the fry coming safely down to the sea; and there ought to be a heck to prevent their going down the mill-lead when the waters are small, and for keeping them back until they feel their way over those parts in the dike left open for them; in going down the river, they ought not to go down the mill-lead in any case. But, as I stated before, frequently when the waters are little, and the whole of the water goes down the mill-lead, they have no other way of getting down but to go through into the mill, or to get into the miller's net, if he has set it; there ought therefore to be a place in the caul, at the top of the mill-lead, above the heck, for allowing the salmon to go up to breed, and for allowing the kelts and the fry to come down at the proper season.

Do you know whether any practices exist in the Solway frith, of destroying salmon during the breeding season, under pretence of fishing for white fish?—There is; and I suppose they took more in the Solway frith last year during close time, at least such is the information I had from the dealers in fish, than was taken during the whole proper fishing season. The net that they had set last year was as complete a stake net as any that ever was set in the Solway frith, only upon a small scale, but they took them in great quantities. They fished with the pock nets openly, and nobody prevented them.

Who are those persons?—They are all salmon fishers, but not the principal tenants of fisheries; they are chiefly the pock, not the net fishers. On Lord Mansfield's fishings in the Solway, there are considerable numbers of such nets; the people on the border and at the mouths of the Esk and Eden destroy considerable quantities in this way; they kipper them and salt them and send them to market in close time.

Is the roe of the salmon in the river Eden in Cumberland, preserved for bait for other fish, and does this afford a temptation to poachers to kill fish spawning in close time?—It is the practice in that river. The roe at spawning time is largest; and thus when the salmon is in the worst state, then the roe answers the purpose best. It is potted. The gentlemen going to fish in the lakes of Cumberland buy it for the purpose of using it as bait in fishing upon those lakes. I have a pot of it in town with me, which I shall produce to the Committee. Such bait could be supplied, without injury to the fishery, from Berwick and those other places where salmon is pickled, at the season of putting up pickled salmon; but in the Eden it is a source of encouragement for the poachers.

Do you consider, generally speaking, that the laws applicable to the salmon fisheries in Scotland, are defective?—They are very defective.

State what you consider to be the defects of those laws?—I consider the great defect is in the want of the protection of the breeding fish, and the smallness of the penalties attached to the offences. They are likewise deficient in the defining of the proper modes of fishing in different situations. The laws in this respect are improper in themselves, and they give rise to many law-suits, from their ambiguity. There is a private Act of Parliament, as I stated before, for the Solway. In many instances, that Act has been found very deficient as to the punishment of offenders; the offender can prosecute himself, or rather get his neighbour, another poacher, to prosecute, and by that means get clear of the fine altogether; there have been instances of their prosecuting one another in this way, to protect them from the fine.

What you would say with regard to the smallness of the penalties, does not apply to the Tweed or the Solway?—Not to those places where the new Acts apply; but by the old statute law, the penalties are very deficient.

Under the old statute law, are you aware that the penalty for the third offence is unlimited?—It is too much again, that a man should forfeit his life for a third offence.

The penalty is unlimited, it may be to any extent?—I think not, under the old statute law.

Are the laws in England, in your opinion, defective?—I do not know so much of

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of the English laws, but they are not the least attended to in any place that I know. There are some places where there might be as good fisheries in England, as in any part of Scotland or Ireland.

Do you know any thing about the Devonshire salmon fisheries?—Not much; I have at different times made some inquiries respecting them, but I could not speak with any certainty. I believe the fisheries have been greatly neglected, and have become a great deal worse than they were.

State, in your opinion, the defects of the law in Ireland?—There are a great number; I do not know that I could point them all out at present. One great defect that we find is, in the unwillingness of the magistrates to put the law in execution. We have great difficulty, and some of our fishings are not so well protected as they would be, because the magistrates are unwilling to convict and fine the poachers. There is a magistrate near the Bann who commands a troop of yeomanry, and he has been encouraging his men to kill the salmon. Last year we prosecuted some of them, and got them convicted; but they appealed to the quarter sessions, and he procured bail for them, and came himself to the quarter sessions to defend them; but notwithstanding his opposition, we ultimately convicted them at the quarter sessions. There are other magistrates who give us every assistance in their power to protect the fisheries. There is another point in which the law is very defective; we cannot summon any man as a witness against another, or to give evidence, at least we cannot compel him to give evidence. If we summon a man, who we know has seen another committing depredations, he may say that he will not say what he saw, and the magistrate has no power of making him give evidence. It is difficult, in consequence of this, to convict any person, for we can seldom obtain evidence. The penalties, in several instances, are not of sufficient amount. The opposition in the country to the protection of the fishery is so great, that we are frequently obliged to get military to go with us, to enforce the law.

Is it your opinion, that if proper attention was given to the salmon fishery, by protecting the breeding fish, the spawn and the fry, and if proper apparatus were used, that the produce of the salmon fishery generally might be very much increased?—My opinion is, that it might be increased so much, that we would hardly find a market for the fish in this kingdom.

Would not that cause a great reduction in the price of salmon?—There can be no doubt of that.

You stated to the Committee yesterday, that you had increased the produce of the river Moy, within a few years, from six tons of salmon yearly, to nearly sixty tons yearly?—Yes.

Be so good as to detail the means which you used for improving the fishery in that river?—The principal means that we used were, appointing people upon the tributary streams running into the Moy, and upon the Moy itself, to watch the breeding fish, to prevent them from being destroyed, and likewise to watch the fry, and prevent the fry from being destroyed.

Are all the fishings in the Moy and the tributary streams in your own possession?—They are.

State what you would recommend as to the modes of fishing which ought to be used, so as to afford the greatest permanent supply of salmon fit for market?—The mode of fishing by stake nets should be extended to the sea coasts, and to the friths or estuaries and bays over the kingdom; and in the rivers the fishing should be by cruives and net and coble.

At what distance from the mouth of the river do you consider that the stake nets would increase the fishery, but not be injurious to the river?—I think that within half a mile of each side of the river would be perfectly sufficient to keep the mouth of the river clean; stake nets might with safety be used on the shores of the adjacent sea coast, friths or estuaries and bays, beyond the distance of the half mile I have mentioned.

Speaking generally, do you consider that fixed apparatus in such situations as they can be used, are preferable to moveable ones?—I do.

In what respects?—In rivers the cruive fishing only takes the salmon going up the river, care must of course be taken to prevent the cruive from fishing during the breeding season. By the cruive mode of fishing there is less injury than by any other, of taking the kelts in the early part of the spring; no salmon are going up the river to breed in the spring, and the kelts go down through the opening which should be kept in the cruive dike: it does not interfere with

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with the spawning bed, for it is stationary, it takes only the new salmon going up the river, and the fry go down through the same opening as the kelts. I say all this on the supposition that proper regulations for the cruives are made and enforced strictly. The same character applies to the stake nets when used in the seas, in the bays and in the friths or estuaries; they do not take any breeding fish out of season, provided care be taken that the nets are not in use during the months in which the close time continues. The nets that are drawn, such as net and coble, frequently bring on shore quantities of the spawn; the net, when it comes near the shore, frequently draws them out of the water. When there are a great number of salmon in the net they are obliged to draw them with some force to the side, and that interferes with the spawning beds, unless when they fish only in pools; when they fish in pools it does not interfere with the spawning beds, for it is on the fords principally that the salmon deposit the spawn.

You consider that the stake nets never are injurious to the fry?—No; I have known the stake nets since I was a boy, at the Solway frith, and certainly I never saw half a dozen salmon fry in them during the times I have been there. The fry does not remain on the ground where the stake nets are set; they go away immediately; there is more destruction infinitely by the boys fishing with hook and line for the fry, than by all the stake nets; I have killed twenty or thirty dozen of fry, when coming from the school at Annan to Newby, in half an hour, with a rod in an afternoon; it is little thought of, but the destruction of fry by killing them with a rod is very considerable, particularly when the fry has arrived at that state at which it is out of all danger of not rising from the gravel and of the other accidents to which it is exposed. Sometimes floods will come down and tear up the beds and the spawn that has been deposited; but the fry when it is killed by the rod, has passed all these chances. Fishing with rods ought to be prohibited during the time that the fry is going down to the sea.

You have stated, that you are a proprietor of a fishery on the river Bush in Ireland; are there any stake nets at the mouth of that river, or do you consider that you could use them with advantage?—Not on that immediate situation. It is a bold rocky shore; the sea goes in very deep along the steep sides of the rock; we fish by toot nets from the rocks themselves, and I do not think that any other practicable mode of fishing could improve that fishery.

You have also stated, that you are a principal proprietor of the river Nith, which falls into the Solway frith, are there stake nets on your fishings on that river?—No; but stake nets have been lately introduced in that river by other proprietors, and I am prosecuting to have them removed.

Are stake nets allowed by a special Act of Parliament in the Solway frith?—They are. The question respecting the stake nets which I have said are in the Nith, is, whether the fishings are in the river or in the frith; if they are in the Solway frith then we consider them perfectly legal, but we say they are in the river Nith, and that they are illegal by being in the river Nith. There has been an appeal to the House of Lords respecting stake net fishings at Kirkcudbright, in the Dee river: it has been strongly litigated, whether the Dee falls into the Solway frith, or not. That case was heard when I was in London about a couple of months ago, but there is no decision on it yet.

In point of fact, you do not use any stake nets in either of the rivers of which you are a proprietor and do not desire to use them in those rivers?—No; the situation of my fishings in those rivers are not adapted for that mode of fishing. We have stake nets in Ireland at some places where they have allowed us to set them, and we have attempted to put stake nets in other places where they have been cut down.

That is in Ireland?—Yes.

State to the Committee in what situation stake nets can be used with a greater advantage than other modes of fishing?—On bays and friths or estuaries, and upon the sea coast, where the tide leaves the coast a little and where there is current of tide. In all the different bays and friths around the kingdom they could be used with effect.

Do you consider that in such situations a much greater supply of salmon would be taken by the means of stake nets than in any other way?—They would add greatly to the supply of salmon. They would take a great number which would not be taken in the rivers, and they would be taken in the season

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when the salmon are in the very best state. At the present time there are great numbers of salmon on all the coasts and in the bays and friths, which might be taken if there were stake nets, but which will not enter the rivers.

Are there many situations such as those to which you have now alluded, at which great quantities of salmon might be taken by means of stake nets, when no other mode of fishing could be successfully carried on?—There are situations where stake nets would be very successful, and where no other mode that I know of would answer the purpose so well; I do not know of any that would answer so well as the stake nets.

Does your experience enable you to give any instances of a successful fishery having been carried on by means of stake nets, where formerly there was no fishery?—There are a great number of examples in the estuary or frith of Tay, where the stake nets were very successful; for instance, at Mr. Hunter's at Seaside, when we commenced there we were very successful in the fishery; we were likewise very successful at other parts of the Tay with stake nets, where few salmon had been taken and where few are taken at present.

Then is the Committee to understand, that many of those stations where a great many fish were caught when the stake nets were used, are now almost unproductive?—They are when compared with the produce of the fishing by stake nets; they are certainly unproductive.

If by the law of Scotland stake nets were allowed, do you think there are many stations on the sea coast where successful fisheries could be carried on?—Yes, I think there are stations where they might be carried on to very great advantage; there is a fishery lately established in the bay of Glenluce, which has been very successful with stake nets.

Do you make the same remark as to England and Ireland, as to Scotland?—They are all much the same; I could not make any distinction. There are some very excellent situations in the Bristol channel, and on the coast of Wales in different parts; so that I think I may safely say, that the same might be done in all the three kingdoms.

Are there not extensive coasts where there are a quantity of salmon, but where no fishery is carried on?—There are.

State to the Committee what, in your opinion, are the effects of stake nets with regard to the spawn and fry of salmon?—A stake net neither injures the breeding fish, nor does it destroy the spawn of the salmon or the fry; I speak from having attended those nets, and never having seen any salmon fry in them. I have seen in some of the nets at Newby in the Solway, what are called sprats or skeddens, but those were not destroyed or injured; they were left in pools; and when the tide came, they were carried away by the tide. I have seen them in the same way in the small pools, upon the rocks, and among the gravel left by the tide, where there was no net at all. There is no danger of there being fishing in close time by the stake nets; a stake net cannot be erected without some considerable time being occupied; nor can it stand without observation; the stake net must now partly be taken down at the time that is prescribed by the law, because if it was not it would be seen; it would be easy to detect any person that was fishing.

Do you consider that the stake nets in friths, or at the distance you have mentioned, from the mouths of rivers, would be injurious, or in any great degree diminish the produce of the adjacent rivers?—No, I do not think it would. A great deal depends upon the season. In dry years they would injure the produce of the river very little. In wet years they would do so more. At the season of the year, when salmon is in the best state to be taken, it very frequently happens that they cannot go into the fresh water at all. In many places they could not get up the river from the want of floods, and therefore they would go away again back into the ocean or along the coasts. These would be taken by the stake nets without injury. In seasons when there are great floods in the river, the salmon go more up into the rivers.

You have stated that you are a proprietor of river fisheries, have you any fear of your property being injured if the stake nets were allowed generally in friths and along the sea coast?—Not under proper regulations for protecting the mouth of the river.

Explain what regulations you mean?—I consider the stake net as improper to be set in a river, or within, as I said before, half a mile of the mouth of a river; beyond that I consider that they would not injure the river fishings.

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At what distance from Perth do you consider that stake nets might be used without injury to the river Tay?—One general rule should apply to all rivers; I consider that a river ceases at the point where the tide is not at all times acting upon it by flowing or ebbing; I consider the river to go down till the level where the water is either continually ebbing or flowing under the influence of tide; that at that point is the junction of the river with the frith or estuary, or with the sea where there is no frith or estuary; and I think that above that place, or within half a mile from it, down the estuary, or along the coast, no stake nets should be allowed; this I would recommend as a general rule, applicable every where; but at the same time, stake nets ought not to be admitted in the channel, even of the estuary; the channel ought to be kept clear of them.

The channels of the friths or estuaries?—Yes; the stake nets should not go beyond low water mark.

Then, in point of fact, do you consider that stake nets might be placed at sea side in the frith of Tay, without injury to the upper fisheries?—Not altogether without injury, but the injury would be small in comparison with what would be the produce of the stake nets; those nets would take great quantities of salmon that would not go up the river.

When you speak of the ebbing and flowing of the tide, do you mean wherever there is a flux and reflux of water, or only where the salt water ebbs and flows?—I mean where the tide recedes so much from the river, that the river continues for a time without falling or rising; for instance at Perth, the tide goes up to Perth when nearly full, but for a considerable time during each tide, the tide leaves the water at Perth altogether, and it is the river Tay flowing down uninfluenced by tide; and for a considerable way down below Perth, it is the same as at Perth; the tide leaves it entirely; it remains for a certain time running water, coming out of the country without rising or falling like the sea; but there is another point farther down, at which it arrives at the salt water, where the tide is always operating; at this place, where it meets the salt water, where it ceases to be as it is at Perth, a mere running stream, not continually under the influence of tides, is the point, I think, where the frith begins, and within half a mile of which, on each side, stake nets might be allowed.

Will you state the point in the Tay where you think stake nets ought to be placed?—Wherever the beginning of the frith could be fixed in the way I have mentioned, or half a mile distant from that point; this would apply to all rivers generally.

Point out the place in the Tay to which that applies?—I believe there was a survey made by Mr. Jardin, civil engineer, who pointed out the place, but I do not know the names of the places about there; it is near Mugdrum.

You have stated, that if certain regulations were attended to in the stake net fishery, that that would be a sufficient protection to the river fishery; state what regulations you would apply to the stake nets?—The regulations I would propose are, that they should be allowed in rivers, or within the distance of half a mile from the mouth of any river, the mouth of the river being fixed in the way I have mentioned; that they should not extend into the channels of the estuaries; they ought of course to give over fishing the same as adjacent the river.

Would you, as a river proprietor, consider such regulations to be sufficient to insure you against any considerable diminution in the value of your property?—I would.

At one time were there not a considerable number of stake nets in the frith of Tay?—We were the first that introduced them there; it was upon Mr. Hunter's fishings; we erected them afterwards upon Mr. Wedderburn's property; upon Mr. Stewart's of Cudford, Mr. Morrison's of Naughten, the town of Dundee fishings, and on the fishings of several other proprietors; and there were others that erected them on the frith of Tay; there were different companies that erected stake nets upon the Tay, and fished with great success.

Was the total produce of the frith and river Tay taken together, very much increased by the introduction of stake nets?—It was; upon a comparative statement made in the Tay process, it appeared that there had been a considerable deal more fish killed and taken than had been when the stake nets were not in the Tay; in 1804 the stake nets were prohibited for some time; and in that year the fishings were confined to the coble nets, the quantities taken were not

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above one third of what they were in the following year, when the stake nets were in use again; and I believe, since the stake nets have been put down in the Tay, that the quantity now taken is not nearly equal to the quantity that was taken when the stake nets were upon the Tay.

State, as nearly as you can, what was the annual average produce of the frith and river Tay taken together, before the introduction of stake nets, and the average annual produce while they were in use?—It would not be very easy to state that just from memory.

Have you any document from which you can state it?—There are documents that would do it, in the process regarding the Tay stake nets.

If you saw those documents in the process, are you perfectly acquainted with them, and could you state to the Committee that they were accurate?—Yes.

[*The book produced to the Committee by a former witness, Mr. C. Kerr, was handed to the witness.*]

Look at this statement, and inform the Committee what was the annual average produce before and after the introduction of stake nets?—I shall prepare an abstract of the statements, giving the account, if that is required; but the accounts are so numerous, that I cannot state the total numbers at present; I am certain, however, there was a great increase.

Then the Committee is to understand, that by the use of stake nets in the frith of Tay, there was an increase in the total produce of the Tay fisheries?—Yes; it will so appear, if an abstract is made.

What were the effects on the river fisheries, when the stake nets were used in the frith of Tay; was there any perceptible diminution in the produce of the upper fisheries?—In some of the fisheries there was, and in others there was not; they increased.

Can you state to the Committee any of those fisheries where the quantity decreased, or others where the quantity was increased, and about what quantity the decrease or increase was?—I know that Lord Mansfield's fishings increased, and one or two others; I will, if it be required, produce a return, showing where the fishing increased and decreased.

Then, is it your opinion, that a great additional quantity of fish could be taken in the river Tay, without any considerable injury to the river fisheries?—There is no question that the stake nets would take some salmon that would go up the river, if not so taken, and the upper fisheries would be so far injured; but the injury would not be considerable, and the stake nets would take a great number that would not go up the river.

In those stake net fisheries which you carried on, did you catch many salmon with the ebbing of the tide?—Yes, we catched considerable quantities returning towards the sea; going down the frith again.

Then, do you consider that there are many salmon in the frith of Tay which do not go up the river, but come back with the tide?—Great numbers, every tide.

State why you think so?—We had several nets that would not take the fish going up the river, but were set for the purpose of taking them going down; and we knew that those fish were actually taken by that net in their progress to the sea.

If they had not been caught, would they not have returned to the river?—Whether they would or not it is impossible to say, but it is very likely they might be destroyed in the sea; there are many fish that feed upon them.

Are there a considerable number of grampuses and seals in the mouth of the firth of Tay?—There are great numbers; there is no place, I know, where they are so plentiful as in the Tay, though there are porpoises almost at every place in the sea and in friths where there are salmon.

Do you consider these different species of fish as very destructive to salmon?—I do; for I consider they live wholly upon them when they get amongst shoals of salmon; they may eat other fish, but we see them chasing the salmon, and we see them catching them. It is easy to distinguish when a porpoise is following a salmon, he goes so rapidly; when he comes up to breathe, he makes the water rise to a great height above his head.

Does he not do the same when he is in pursuit of any other fish?—In those places where we have seen them, there are few fish besides the salmon; there is no doubt they may eat other fish, but I think they destroy an immense number of salmon.

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salmon. I never myself saw a porpoise opened, but there is the evidence in the Tay case, of a man who is very worthy of credit, and I think he says he had taken as much out of the inside of one of them as he could have carried.

Can you give the Committee any idea of the number of grampuses, porpoises and seals, which in your opinion may be supposed to be in the frith of Tay, in one fishing season?—It is almost impossible to come to any exact number; where I have seen them most plentiful is between the two ferries; I have seen the water there sometimes quite covered with them, nearly just between the north and south ferry, but I cannot state what number there are.

How long are the grampuses and porpoises usually in the Tay?—They are most plentiful always when the salmon is plentiful; we do not see them much when the salmon is not plentiful; but in the Solway and in the other friths, when they have had a bad fishing, and see the porpoises coming up, they say There is going to be a good fishing; it is considered as a sign that the fish are coming up the frith.

Do you consider the seals as very destructive of salmon?—They are.

Do they remain in the Tay all the year round?—They do; they are chiefly in the mouth of the Tay, and in the bay at St. Andrew's; there are very few in the Solway, but in some of the rivers in Ireland there are great numbers of them. In the Moy there are great numbers of seals, which live upon the salmon. When we draw our nets at Ballina, they frequently come into the net, and take fish out of the net when we are looking at them, and two or three men are firing at them at the same time; in the rivers, I have seen them popping up their heads with a salmon in their mouths frequently.

Have you ever formed any estimate what number of salmon must be destroyed every day by those animals, in the frith of Tay?—That is quite impossible; but the number is very considerable.

Do you suppose, that each of them could eat two or three fish a day if they could get them?—I am certain that a porpoise would take twice that number; and I am certain that a seal every day does destroy that number, and more.

Will you state to the Committee, why you think the seals kill so many?—Because I have seen the seals at the fisheries, and observed the destruction they occasion. The size of a seal is very great. There are some of them at Ballina nearly as large as a small cow or a horse; and some of them are very large in the Tay too, but I think I have seen larger ones on the coast of Ireland than I have seen in the Tay.

Is it your opinion, that many of the fish that are taken in the stake nets in the frith, would be destroyed by seals if they were not taken in those nets, particularly those fish going down the river?—Yes. We get them frequently marked by the bite of a seal; that have the marks of the teeth and the marks of the paws of the seals upon the salmon; at least with marks which we considered to be made by the seals, having marks of the teeth on each side; I have seen little pieces bit out of them sometimes.

Does what you have stated of the destruction of salmon by those different kinds of fish, apply to all the fishing stations you are acquainted with?—It applies to most of them; but they are more plentiful in the Tay than in any place where I have seen them. There are very few seals in the Solway frith. We have a few in the Foyle, but only very few. None in the Bann; but the porpoises are in all the sea-coasts round Scotland and Ireland.

Do you consider the effect of stake nets on the coasts about Arbroath and Montrose as injurious to the Tay fishery?—No, I could not conceive that they could do any injury.

Suppose a stake net fishery was established in Fifeshire, at Ely, do you think that would at all injure the Tay fishery?—It is my opinion, that it would not.

Have you ever known any salmon fry to be destroyed by stake nets in the open sea?—No, I never saw such a thing.

Do you consider that the stake nets in the sea are injurious to the fry of any other fish?—No, I do not conceive they are; for I never saw any destroyed in them.

Do you consider that all the salmon caught by stake nets placed at the mouth of a frith or river, are fish which would have gone up that river?—No; I do not think they would.

Will you explain your reasons for that opinion?—The salmon are caught by the stake nets at the season of the year when they are in perfection. They are

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then in the sea and in the friths; and if not taken, by far the greater part would be destroyed by porpoises, by seals, and by other fish. They would not be allowed to remain till they sought up the rivers when the breeding season commences; and of course, if not taken, they would be entirely lost to the public.

Did not you state, that it was only the fish that had a disposition to spawn, that were certain of running up the river?—I think I stated before, that salmon visited the rivers for different purposes; that they come up the river to get clear of that vermin which attached to them in the sea, and that they return to sea again from other vermin that attached to them in fresh water.

Are there any salmon taken by the stake nets, that, if not destroyed, would go up the river to breed?—I think so.

You stated, that when they are caught in the mouths of rivers, many of them would not go up the rivers at that time?—Many of them would not.

What do you consider to be the effect of stake nets with respect to the navigation of friths, are they injurious or useful?—I think in friths they are useful; but if they are set in rivers, or beyond the point that I spoke of before, I consider them as injurious to navigation.

That is to say, if they are set beyond low water mark?—Yes; when the bill in 1804 was brought in for the Solway frith, there was likewise a bill brought in by Sir William Pultney, to put down the stake nets in the Solway frith, and it was thrown out by the House. At that time, the sea-faring people who had frequented the Solway frith, wrote a letter to be communicated to the Committee, saying, that the nets were of great advantage; that often in coming up in dark nights when they met with a stake net, they knew exactly where they were, whereas, if they had not met with the stake net they must have remained, and would not have known the channel nearly so well. Where the stake nets are set in the river Dee, I consider them hurtful to navigation, for they are set nearly across the whole channel.

The Dee, in Cumberland?—No; the Dee at Kirkcudbright.

Have you ever known any vessels to be injured by stake nets?—Never.

You speak at present in regard to the Solway and the Tay, and you likewise mentioned the Dee; are there any other rivers where you consider the navigation injured, or improved, by the use of stake nets?—Not in any that I have seen.

Do you consider that more vessels now in the frith of Tay run upon the banks than they did, when the stake nets were in use?—I have not been there since the stake nets were taken down; at least not to remain above a day or two.

Do you consider, that there is any difference in the quality of salmon taken at different parts of the same river, or in the estuaries, or on the sea coast?—I do not consider there is, provided the salmon is taken soon after he enters the fresh water. If he remains any length of time in a fresh river he becomes worse; but if he is taken in the course of a few days after his entering the river, I do not consider him any worse.

But when he ascends the stream high, does he not soon fall off?—Yes; when he lies in the fresh water.

Then, speaking generally, you consider that the salmon caught in the tideway or sea, are of better quality than those caught higher up the river?—I consider them of the same quality as those caught in the river; but I say, that the salmon become very soon not so good, after being in the river any time.

Supposing a fishery to be established 25 or 30 miles above the tideway, do you not think the quality of the fish caught there, are inferior to those caught near the sea?—If there is a flood in the river, a salmon will go an immense way in one tide, he will go more than the distance you have mentioned in one night; and the salmon, if taken, what we call new run from the sea, is very good. In rivers we always know the new run salmon by the marks that they have, of being newly run from the sea. While these marks remain upon the salmon, he is in good order.

Then do you state to the Committee, that after a fish has been a week in the fresh water, he begins rapidly to fall off?—Yes; but during the fishing season, there are very few salmon allowed to remain a week in the fresh water.

Do you mean to state to the Committee, that after a fish has been 10 days in the river, that then his quality is inferior to that of a new run fish?—I should conceive he is worse.

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Are there any circumstances connected with the modes of fishing, which affect the quality of the fish?—I do not know of any; if the salmon are allowed to remain for a length of time in cruives it injures them a little; but if they are taken out, which they generally are once a day, they are not injured at all. This season we have, in some cruives, been obliged to keep them longer from the want of ice, and they injure themselves in the cruives against the bars.

Are the fish ever injured in the coble net fishery, by being dragged along the sand, and exposed for a considerable time to the sun?—If exposed to the sun, they certainly do get very soon worse; they get dry, and the skin gets quite hard; but if the fishermen are careful, that need not happen; it depends entirely upon the care of the fishermen.

If the stake nets are properly fished, are the salmon at all injured by that mode of taking them?—No; if the fishermen do their duty, they ought always to take the salmon before they are dead.

Jovis, 3° die Junij, 1824.

THOMAS FRANCIS KENNEDY, ESQUIRE,

IN THE CHAIR.

George Little, Esquire, again called in; and Examined.

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FROM the Abstract which you furnished to the Committee, showing the produce of your fisheries in Ireland, there appears a great increase in the produce of the Ballina fishery, but that in the Bann fishery there has been a decrease; what are the causes which have led to this decrease, while under your management other fisheries have increased so much?—The Coleraine or Bann is a late fishery, and in the year 1820, in the spring of that year, I considered we lost nearly all the fry; the dry spring did not allow them to come down the small rivers; they were collected into little pools, and the people in the country destroyed them, and in the end of that season of 1820, the fishery fell off to 42 tons. I consider that the fishery had not recovered that loss till last year; it is beginning to increase, for this year it is fully as good as any year we have ever had. There is another cause for its falling off, the great difficulty, as I said before, with respect to the magistrates and the people in the country not giving us that assistance we could wish in prosecuting offenders; we had great difficulty in getting the law enforced; the people gather in considerable numbers, and they go by force sometimes and fish, in spite of us; notwithstanding all that the keepers can do, they still fish; they go in great numbers, and some of them with arms to protect the body and the rest fishing. As I stated before, there is a magistrate who commands the yeomanry corps, who rather encourages his yeomanry to go out in that way.

What is the name of that person, and where does he live?—Alexander Orr; he lives in Aghadowy.

Whereabouts is that?—About four miles above Coleraine. This last season, after we had convicted some people of poaching upon the waters, he came forward and procured bail for them, when they appealed to the quarter sessions, and he came forward to the quarter sessions to defend them; but the other magistrates found them guilty. We convicted them in the first instance before the local magistrates, and they then could appeal to the quarter sessions; they appealed to the quarter sessions; he got them bailed, and he came forward to the quarter sessions to defend them, but we succeeded in getting them convicted before the quarter sessions. There are other magistrates that are very willing; they do their duty very willingly; some magistrates will not give themselves any trouble, as they say the salmon are sent out of the country, and they get no benefit from them.

In what station of life is this Alexander Orr?—He is a magistrate.

What is his profession?—He is a landed proprietor; he is a bleacher; he carries on a large bleach field; he commands the yeomanry in that district.

Is he the head of the corps?—He is the captain of a troop.

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Do you know who is the commanding officer of that corps?—I do not know.

What is the name of the troop he commands?—I think it is the Aghadowy troop. There is another person who commands a troop on the opposite side of the river, Mr. Samson More, who on all occasions is ready to assist the water-keepers, and give them protection in the country; and if any of his yeomanry are found fishing, he immediately discharges them.

Does Mr. Orr ever act as a magistrate, in judging the cases brought before him for breach of the law as to the fisheries?—Very frequently.

Do convictions frequently take place before him?—He is not very fond of convicting, and I believe he said openly, that he will not convict any body for fishing; I have been told so; I believe I can prove it if it be necessary. We have our water-keepers very frequently shot at, and we have had one actually killed by the people in that district. I myself have been shot at. I mentioned formerly that one cause of the falling off of the Bann fishery, is the smallness of the meshes of the nets that they fish with at the mouth of the tributary rivers which run into Lough Neagh; there has also been a number of bleach greens and dam dikes erected on some of the rivers that fall into the Bann, which is another cause of the decrease; there is likewise the destruction by the eel weirs, which I formerly mentioned.

What is the size of the meshes of the nets of which you speak?—About half an inch from knot to knot.

So that even salmon fry cannot possibly get through?—They cannot, and they fish at the mouth of those little rivers for the purpose of taking salmon fry when they come down.

It is not the regular salmon fishers that do that; it is the poachers, and people of that sort?—It is the poachers and the fishers on Loch Neagh.

There is also an apparent decrease at the Port Rush fishery; what explanation do you give in regard to that?—The Port Rush fishery is a fishery in the sea, and some years we had the whole of the fishery, and other years we had only part; from my statement the Committee will see, that it is noticed that we did not, for several years, have the Port Kneen fishings, while in other years they are included. I conceive there is no decrease in those fishings, had we the whole of them; some years we have the whole, and other years we have only part.

Then you mean to state to the Committee, that what appears with regard to the falling off of the Port Rush fishery, is merely because in some years you rented a smaller portion of the river than you did before?—Yes; we had a smaller proportion of the fisheries. The fishery now belongs to Lord Mark Ker, and when he came to the estate some years ago, he wished to supply the county with salmon from the fishery, and he therefore took a great part of it into his own hand, and the salmon caught there are reserved to supply the district; he will not send them out of the country; that was the reason of our not continuing to have the whole as usual.

There has also been an apparent decrease at the Bush fishery; what explanation do you give with regard to that?—I do not think there is any decrease in the Bush fishery.

In the Foyle there appears to have been an increase, but it is not nearly in proportion to that in the Ballina fishery; have you met with any obstacles to the improvement of the Foyle fishery?—I consider, that when we got the Foyle fishery, it was under good protection; that was not the case with the Moy at Ballina; the Moy had been allowed to be poached, and had no protection, while the Foyle had been pretty well protected. We could not, therefore, improve so much at the Foyle as at the Moy; the Moy had been a great fishing formerly, long before we got it, but from the want of protection it had fallen to the state in which we found it, and it improved in a great degree when protected.

Have the goodness to explain to the Committee the system on which you act in the protection of the rivers with which you are connected; do you employ one general water-keeper at each river, allowing him to employ assistants over whom he has control, or what is your mode of proceeding?—The different rivers that I speak of, such as the Bann, the Moy, or any of our fisheries, have all attached to them great numbers of small rivers, which go into the country; these are generally the best for breeding in; we very frequently engage a man, to whom we give rather more than to the others, to look over them, and keep them to their duty, and he is like a serjeant over a certain number under his command,

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command, who can be called out when he wants them, and we generally have at the fisheries a man a general superintendent, who goes over all the others, and gets the fines and penalties inflicted by the magistrates; but it requires a man to understand the law pretty well to go to the magistrates, in order to be able to answer the questions they ask; there are a great number of different Acts of Parliament relative to the fisheries in Ireland, which the magistrates are not acquainted with, and therefore they are a good deal at a loss in convicting offenders. The superintendent generally carries the various statutes with him, for the information of the magistrates.

Can you give the Committee any statement respecting the expense of your system of protecting rivers?—It is different on different rivers; such rivers as the Bann, the Moy and the Foyle, will cost us from 300 *l.* to 400 *l.* a year each.

What is the value of the fishery on these rivers; I ask this in order that the Committee may understand the proportion of the expense of preservation?—We hold very long leases, and we do not pay such heavy rents as we would otherwise do; I should suppose that the fish from each of them would be worth at least from 5,000*l.* to 6,000 *l.* per annum; that is the gross value. In some years 8,000 *l.* to 9,000 *l.*

The expense of preserving the fisheries in any particular river must very much depend on the length and the course of the stream?—A good deal.

And upon the nature of the river?—We can protect the Bann, for instance, at very little expense, because it is a deep river; the salmon are not so easily taken out from it, but when we go high up into the smaller rivers, it requires a greater number of men to protect them properly than it does in the deep parts of the river.

The nature of the population of the country must increase or diminish very much the expense of preserving?—Very much, and a good deal is owing to the backwardness of the magistrates to give that support to the water-keepers which they require.

On the supposition, that all parties having interests in the fisheries in the Tay, meaning by that both the river, the estuary and the tributary streams running into it, were to agree to establish a system for protecting salmon fisheries, at what annual expense should you think that such system of protection might be effectually maintained?—The fisheries are greater in the Tay than in the rivers that I speak of in Ireland; but the country there is not nearly so populous as the country in Ireland, and it could be done, on that account, at less expense. I do not think it would exceed the expense of any of the rivers in Ireland. At first it might take a greater expense than after it had been under proper regulation for a few years; I should think it would be about from three to five hundred a year.

Should you not think that a very great return would be made for such an annual expenditure, to the owners of the fisheries in the Tay?—It would more than double the value of their property.

What was the size of the meshes of the stake nets with which you were acquainted in the Tay?—They were generally from eight to twelve inches round.

From two to three inches from knot to knot?—Yes.

Is it your opinion, that if any general law were passed regarding the salmon fisheries, there should be a general regulation as to the size of the meshes of the nets; if so, state what you would propose?—I should think, that no nets should be used less than an inch and a half from knot to knot (they may make them as large as they please), except for fishing for herrings and spirlings.

Would you have them so small as an inch and a half?—An inch and a half would do no injury.

The Committee are not to understand that you recommend nets of that smallness of mesh?—I mean only, that none should be smaller than that.

But the generality considerably larger?—Yes.

Do you apply this observation to stake nets as well as all others?—It is the interest of the stake net fisher to make them a great deal wider than that.

Is there not an injurious practice sometimes resorted to, of doubling the nets?—There is, and sometimes they fish with three nets; a narrow-meshed net in the middle, and two wider ones on each side.

Ought not such a practice to be strictly prohibited?—It ought to be abolished altogether.

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What arrangement would you consider necessary to guard against the destruction of salmon and salmon fry, by the using of nets for catching herrings or spirlings?—They should not be allowed to use them where the salmon fry are to be found; they should be particularly prohibited in the rivers when the salmon fry are coming down.

You formerly mentioned, that in the Solway frith there were salmon destroyed in close time, in nets constructed on the pretence of fishing for white fish; is this a practice peculiar to the Solway?—It is. I have seen them fishing for white fish. I never saw there nets that could kill salmon; but in the Solway they make the nets of such strong material, that they take all the salmon that come in their way; and, as I stated before, I believe I can prove, from the dealers in salmon in the neighbourhood of the Solway frith, that there were more killed in these nets by poachers during the winter season of last year, than was killed during the proper season for killing salmon.

By whom are those nets which are constructed so strongly, made and used in general?—At the burgh of Annan, some of the people have a right in common of setting pock nets, which are fished during this season of fishing; and the people of Bowness on the other side, and the people on the borders of England and Scotland also fish with these pock nets. It is generally those pock net fishers, who have very little right in the fishery, who destroy the fish in close time in the way I have mentioned; none of the large proprietors of fishings, or their tenants, do it; it is all done by those who are called the pock net fishers.

You no doubt consider this a very injurious and improper practice?—It is a complete destruction to the fishery.

Then the Committee is to understand, that this practice is not any way connected with proper salmon stake nets?—No; they are not connected with the proper salmon stake nets.

Can the stake nets be used in that way?—If they were allowed to fish during the close time, they would be equally injurious.

Are not all stake nets removed when the close time commences?—They are in every part that I know of; it is by stealth when they are not.

You mean to state a decided opinion, that they ought to be so removed?—That they certainly ought to be removed; that could be very easily enforced, for you cannot fail to see them if they are allowed to remain; and they require a considerable time for their erection, several days.

The stakes are removed with the nets?—In most instances they are.

You mean to state, that stake nets cannot possibly be erected and used during close time, without being observed?—Without being observed by every body almost.

So far, any abuse of the stake nets is more easily detected than the abuse of other modes of fishing?—Very easily.

What means would you recommend to guard against poachers fishing for salmon in close time, under pretence of fishing for white fish?—In allusion to the Solway frith, for I do not know whether it is done any where else, they should not be allowed to fish with any thing of a stronger net than what is necessary to take herrings; such a net would not take the salmon.

But it would be sufficiently strong to take the fish for which they pretend to be seeking?—More than sufficiently strong. It is principally flounders and small cod-fish that they pretend to fish for.

Have you occasion to know an engine used in some rivers, for catching salmon, that goes by the name of a weir?—I have.

Be so good as to describe it to the Committee?—What was considered the old weirs, or zairs, or yairs, is an inclosure taken from the shore, by driving very strong posts into the ground to form a crescent, which is made completely firm with wattlings; the tide flows over it, and the open part of the crescent is up the stream; when the tide recedes, the salmon are left in it.

They are used within reach of the tide?—They are used within reach of the tide; they could not fish, unless they were within reach of the tide.

Is the yair the same, or different from the weir, and in what does it differ from the stake net?—The yair is considered a weir. It was upon that, I believe, that they put the stake nets out of the Tay; it was found by law to be a yair, or weir. But it is impossible that you can set those weirs in situations where the stake nets were set in the Tay; it would be quite impossible; they would not stand, for they would have completely interrupted the tide, and the tide would carry

carry them down, or else it would force the sand from out below them. The stake nets are, in short, quite a different kind of engine for killing fish from the weir, or the yair. I consider that the old weirs and yairs are very destructive things for the fry. There is no fry could get through them, and they are placed in the course of the fry. It is different in the stake nets; but they had no means of getting through those old weirs.

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Then you wish the Committee to understand, that the weir or yair is altogether different, both in its nature and its effect, from stake nets?—Certainly they are quite different. The stake net is set in situations where the other could not be. The stake net has not the effect of destroying the breeding fish or the young fish.

Have you ever seen any considerable quantity of salmon fry in the weirs?—I never saw any weirs in the north country, but I understand there are a great number in the north of Scotland; I have seen them in the Lune, at Lancaster, and the fry destroyed in great quantities.

Do you know that there are three or four such weirs as you have described, placed on the river Findhorn?—I never have seen the Findhorn myself; but I have understood, from my late brother John, who made a survey of all the coast of Scotland, that there were several at that place. They were the same kind of weir that I have described, made by driving stakes in and wattling them.

Have you also heard that there are such engines in the river Conan and the river Allness, which run into the Cromarty frith?—I have heard that they were in general use along that coast of Scotland, but I cannot speak positively as to any particular one. My information is from my brother; I have a memorandum of his; I know he surveyed it, and he took a note of the whole at the time.

Do you consider that such weirs might be abolished, without the owners of such weirs suffering materially in the value of the fishery, by obliging them to use different means, which should be less injurious to others and to the breed of salmon in general?—In situations where they can use stake nets it would improve their fishings.

Do you consider that wherever weirs are established stake nets might be established in room of them?—In some places they might; in some they might not.

Can you suggest no way in fishing with weirs, by which the small fish might be permitted to escape?—I stated, on my last examination, that I considered that within any river, or within half a mile of the mouth of any river, I considered the stake nets to be improper, and accordingly I would not approve of the placing of stake nets in such situations in any case; but one great objection to the weirs is their killing the small fish, and stake nets would not in that respect be so very injurious; and therefore if it was a choice whether there should be a weir or a stake net of the same dimensions in a river, I would prefer the stake net, as by far the least objectionable of the two; it would not be so destructive of the fry.

When you speak of the mouths of the rivers, do you not mean the point where the fresh water reaches the tide in the sea or the estuary at low tide?—Yes, in the estuary, or in the sea if there be no estuary, at the low spring tide.

Then you consider, that if stake nets are not placed nearer that point than half a mile distant, they would not materially affect the salmon fishery of the upper river?—I consider they would not materially affect it. There is no doubt that they would take some fish that would otherwise go up the river, and they would thus affect the upper fisheries a little; but they would take a great number of fish that would not go up the river.

Are not weirs or yairs constructed so that they remain in the river at all seasons?—They never take them out; they generally repair them in the spring.

Is it possible, consistently with such permanent works in a river, to observe the close time, if persons have any disposition to violate it?—It is not possible that they can observe the close time unless they take out a part of the wattling, where it is lowest in the water, or where the water last leaves it.

In point of fact, is any opening generally left in the weirs in those rivers where you know that weirs exist?—I never knew it to be done.

Supposing that by law they were obliged to use nets instead of wattling, might not these nets be taken away at the close time?—Yes, very easily.

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So that nothing would remain but stakes or posts upon which those nets would be applied?—Nothing more.

Should you not consider that such an alteration in the construction of weirs would be eminently beneficial to the fisheries, and that it could be made without diminishing the value of those fisheries which are now carried on by means of weirs?—I have not the least doubt that it would be of great benefit to the fishery, and without injury to those particular fishings. I consider that it was the destruction of fish in these kind of weirs that caused the Legislature to make the enactments for putting them down.

Do you not, therefore, consider that some alteration of the system of regulation of weirs is as important an improvement as can be made in the salmon fisheries?—I do think it is a very important improvement.

Do you consider that the destruction of salmon fry by anglers, is so great as to occasion any serious injury to the fishery?—I do think it is. There is an immense quantity taken out of the different rivers by anglers, in a state out of which they would be certain to grow to perfection. I have known even boys and children go and kill, in the course of an afternoon, 20, 30, and 40 dozen. I have known a man kill 35 dozen in an afternoon; and if you take even 20 or 30 in a day of those fishers, what an immense number it comes to!

Do you know that it is customary at Dumfries, and other places in that part of Scotland, to catch great numbers of fry, and sell them in the public market?—Last year the fishers took them, and brought them to market, and sold them for a shilling and for six-pence a plate full; they sent little girls round the town selling them; they put a certain quantity in one plate, which they sold at a shilling, and a certain quantity in a lesser plate, which they sold at six-pence. That was done to a very great extent, and I believe my own tenant was as guilty as others in doing it.

Will you be so good as to state what you know as to the destruction of salmon fry by anglers?—I have seen at least twenty, within the sight of my eye, fishing upon the river, both in the Nith and in the Annan; and I myself have taken as large a quantity as any I have mentioned, in coming from school, after school-hours, when a boy. There was an excellent place for fishing between Annan and Newby; I have taken three and four up at a time, as fast as ever I could throw my line into the water.

Is the number of salmon caught by anglers considerable?—No; I do not think that allowing gentlemen to angle for salmon at the proper season is injurious to fisheries at all, provided they have got liberty of the proprietor or the tenant of the fisheries to do so. In Ireland there is a law against people angling, or keeping a rod, that have not a certain qualification; and it certainly would be as well for idle tradesmen that they were prevented from fishing, unless the liberty of the proprietor or the tenant was first obtained. Neither the proprietor nor tenant would ever refuse a gentleman from angling upon his water. I have never done so.

Is there not a greater avidity in the black fish than in the clean fish to take the fly?—Certainly, much greater. A new run fish will not take the fly so easily as a salmon that has lain some time in the river.

Do you think that, during the season when the fry is descending from the upper part of the river to the sea, that angling of any description could be permitted with safety to the fry?—No, it could not; for although gentlemen would fish upon the river, and not kill fry, yet the people who are watching them could not tell who was taking fry, and who was not.

How can any person angling at that season be sure that he will not kill fry?—That might be very easily done; he might fish with hooks so large that they would not take fry. The hook that you fish with for salmon is larger than any fry would take.

Do you consider that at present a great number of salmon caught by anglers are foul fish?—No; I do not know that the salmon caught in the proper season in the summer months are foul fish. They are as good as any that are killed; but if they are killed in the winter season, I consider that the greatest part of them are foul fish.

Do you know that poachers make angling a pretence for observing, in close time, where the spawning fish are lying upon the fords, in order to kill them during the night?—They do; I know that has been very frequently done. I have been told it by people who have practised it, and who have afterwards engaged

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engaged with us as keepers. We find that poachers are the best water-keepers that we can get. They tell me, that it is the invariable practice to go, during the day, and find where the fish are, and go in the night and kill them.

Is it your opinion, that the fry are injured, in any degree, by the refuse of the manufactories being conveyed into the spawning waters?—Yes; there has been a great destruction in many rivers in England where the manufactories have been established. Some have been entirely deserted by that species of fish. There is lime, and other things which will kill the fry, polluting the water coming from those places. There is a very bad practice of tanners and hatters, and those persons who cure sheep-skins, putting them in lime, and letting the refuse go into the little river; they frequently come to the rivers, and wash the filth from the skins. The steeping of flax in the rivers is very injurious, and will kill the fry.

Are gas washings obnoxious to the fish?—They destroy them; there have been several complaints by fishermen in the Thames that they destroy the fish.

With regard to those substances that you have mentioned as obnoxious to the fish, when they are not actually of such strength as to kill the fish, do not they deter the salmon from ascending the river, by polluting the water?—They certainly do. If the salmon tastes any noxious thing of that kind, he immediately turns away from it.

You formerly mentioned that injury arises from mill races; do you consider that injury is occasioned by the dikes at bleaching works?—That has the same effect that other mills have. At bleach greens there are generally a great number of men employed in the works, and they collect about those places; and thus the bleaching places are worse than the corn-mills, from the number of men that are employed on the spot.

State to the Committee what you would recommend as a remedy for these mischiefs?—There ought to be a law to oblige every person who had any dam-dikes, or similar thing across the rivers, to leave an opening in the centre for the salmon going up, and the fry coming down.

That is as regards mill-dams?—Yes; and I formerly recommended also that there should be hecks put to prevent the fry from going down the mill-leads. Both this heck and the opening in the dike are necessary. There is an opening in the dam-dike at Dumfries, which they are obliged to keep open so many hours every night, for the purpose of letting the salmon through.

Are you not aware, that there is an Act of Parliament in Scotland that requires constant openings to be kept in all dam-dikes?—I believe there is, but I am afraid it is not sufficiently strong; it is not attended to.

Have you occasion to know that, in some rivers, clean fish may be taken occasionally during all seasons of the year?—Yes.

Is the Committee to understand, from that statement, that salmon do not all spawn every year?—They certainly do not; when you can get new run clean salmon, with little or no roe in them, in the winter season, they cannot spawn that season.

Do you think that improvements upon the salmon fisheries, in general, would be important, with a view to the employment of the people?—It would. The protection of fisheries along the sea-coast would add greatly to the employment of the people along the shore; likewise in the friths and bays. On the coasts not only the fishers, but other people would be employed; some in making twine, and in making nets, and different articles.

State the number of persons whom you now employ in your Irish fisheries?—In an account that I gave in to the commissioners for the encouragement of fisheries in Ireland a few years ago, I made out nearly 800 as employed by us. I conceive that we have now fully more than 800.

Is that number considerably larger than it was when you commenced your fisheries in Ireland?—It has always increased; the more fisheries we got we employed the more people. We have employed more than were formerly employed upon those fisheries considerably.

You have increased their number?—Yes.

Do you consider that, at the other fisheries with which you are acquainted, a very large additional number of people might be employed, if the fisheries in the estuaries and on the sea-coast were encouraged as much as they might be?—There can be no doubt of that, because they could not be carried on without

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employing a greater number of people. When the stake nets were in the Tay there were a great number of people employed.

A considerable number of persons at present employed in poaching would be out of employ?—They would be better employed in killing the salmon at the proper season.

Do you know any means by which an accurate account of all the produce of all the Scotch fisheries could be obtained for a series of years?—The most accurate account that could be got at (for some people cannot give accounts of their own fisheries) would be from the wharfingers in London; you could get it very correctly from them, and very nearly the quantity, and also the quantities during each month.

Are you aware of any means by which similar accounts can be got of the annual produce for a series of years, of the English and Irish fisheries?—I do not know of any, but my own accounts, which I will furnish as exactly as I possibly can; I think it would be very difficult to get any account of the English fisheries; I have been told, from inquiring of people with respect to the fishings in the Severn, that the salmon were formerly very abundant all along the Bristol channel, so much so, that in the apprentices indentures it was a clause, that they should not be fed with salmon more than two days in the week.

You formerly stated, that you are a tenant of fisheries in the river Moy, in Ballina?—Yes, for nine hundred years the one-half of it, and for fifty years the other half; still I am but a tenant in that river.

Is there a considerable stream which joins the Moy below the fall in that river?—There is; it is called Bunree.

Do the salmon leap this fall?—They can go over it at tide time without leaping; after the tide rises they can go over it.

Do the salmon spawn in the upper parts of that river?—Yes, in great abundance; it is a very fine breeding river.

Are there sea trout in that river?—No; there are trout, but not the trout which are called sea trout.

Do the trout go high up the river to spawn, or do they spawn near the sea?—I consider that a trout goes very far up the river to spawn; my general opinion is, that the smaller the fish is, they go the higher up into the little streams to deposit the spawn; but the trout in the Moy are quite a different kind of trout from what we call in Scotland the salmon or sea trout.

Are you of opinion, that the young salmon do not, immediately on coming down the rivers, go far into the sea, and that they occasionally come back in August and September from ten to fourteen inches long, and return to the sea, without attempting to proceed high up the river?—My opinion is decidedly, that they do not come back to the river in that way, but I am quite convinced that the salmon is of far more rapid growth than is generally supposed; when we begin to take the grilse, they grow half a pound every week from the time when we begin to take them, till the time we give over taking them, and I think I could prove it from my own books.

James Gillies, called in; and Examined.

James Gillies.

ARE you a salmon fisher by profession?—Yes.

How long have you been a salmon fisher?—Since I was ten years of age.

What number of years?—I am thirty-six years of age, and I fished since I was a boy of ten years of age; I was four years with my father in the Tweed, and from there I went to the Tay, in the year 1806.

With what rivers and other fisheries are you acquainted?—I am acquainted with a good part of the Tay river, and of the rivulets that run into it.

And the Tweed?—A part of the Tweed, from the mouth to about sixteen miles above Berwick.

Then your principal knowledge of the river fishing is in the Tay, and its tributary streams?—Yes.

Do you consider that the salmon have increased or decreased in that river?—They have decreased very much within the last five or six years.

What do you consider the cause of that decrease?—I consider the cause, that the brood is not protected, and there are so many poachers, and every person just takes the liberty of killing them.

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Do you mean in close time?—In close time, from the 26th of August to the 10th of December, they are poaching all the river over, in most parts of it.

Do you know this of your own knowlege?—Yes, I do.

Is there any considerable quantity of fish killed during the close time?—In the year 1820, I saw 250 salmon, lying in one cellar, in Perth, in the month of September.

Then do you mean to say that there are regular traders in salmon at Perth, in the close time, who purchase every kind of fish, clean or foul, from the people that poached them?—There is a man that buys them regularly from the poachers, in Perth, and retails them out.

Can you mention the name?—There is one Mr. Alexander Campbell, in the Kirk Gate, and there is one Bruce; but I believe that man has failed, and there is one Jamieson at present.

Where does Jamieson live?—In the Water Gate.

What class of people are those, who generally poach the river in close time?—The gentlemen have boats for the purpose of angling the river all the day, and in different parts of the Tay. These boats are lying on the water side, and they are quite convenient for the poachers; they look round in the day, and in the night they just go and destroy the fish.

Have you ever been present upon such an occasion?—Yes, I have.

State what happened when you were yourself present and took a part in this, and how many of you were employed in it?—I have seen sometimes less and sometimes more. I have seen fifty in a night killed.

How many people were employed?—Five and sometimes three.

Then those people, so employed, were regular fishers and understood the thing well?—Yes; the party I was always along with, were regular fishers.

Were you and those other people who were with you, regularly employed by the tenants upon the Tay, during the regular months of fishing?—Yes, they were always along with me.

When did you begin this illegal mode of fishing?—That has been carried on for the last five years in the Tay.

That is to say, that when the close time began, then those persons and yourself began to fish in the night time, during the close time?—Yes, on account of tacksmen of the Tay, they broke the law themselves, and took a great number of days, and it was a complete in-let to poachers; that the men did not care what they did after they saw the tacksmen doing so.

Have you known any of those tacksmen fish out of season?—Yes; we have fished in some seasons till the month of September.

For whom did you fish?—For Mr. James Bell; he is a fish curer or a fishmonger.

Is that Mr. Bell in Perth?—Yes.

Of whose fishings is he tacksman?—He is the tacksman of numerous fishings this present year.

Was he ever tacksman of Lord Gray's fisheries?—He is tacksman of Lord Gray's fisheries at the present time

And Lord Mansfield's?—He was last year, but not this year; he had nearly all the river as a tacksman at one time.

Do you believe that he has been in the habit of fishing out of season during the period that he has been tacksman of those various fisheries?—Yes; in the year 1819 and in 1820 I fished till the 7th of September; in the year 1821 I fished for the late James Richardson, esq. of Pitfour, and he stopped us upon the very day; but Mr. Proudfoot came to me, and asked me, if I would agree to go down to the Earl of Wemyss fishings, to continue fishing for a fortnight, and I was five or six days there with Mr. Proudfoot; and the late James Richardson sent to Edinburgh for an interdict to get them stopped.

Then how many days did you fish before this interdict was served upon you?—Five or six.

When you were not employed by Mr. Bell or any other tacksman, and merely went out with those other fishers, to fish out of season, had you any difficulty in selling what you caught?—I never found any difficulty for any that I got, I always found a very ready market for them.

How did you share the quantity of fish you took?—We sometimes divided the fish and took so many each, and sometimes when we sold the fish we divided the money amongst us.

How

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How many have you ever caught, in a night, in that way?—I have seen upwards of a hundred killed in a night.

Were all those fish full of roe when you caught them?—Some of them were very full, and others again were not so full.

Where did those persons, in Perth, who bought them from you, appear to send them, or how did they sell them?—They had generally people that took them and kippered them, using salt petre to make them red, and sent them from Perth to Edinburgh and Glasgow.

Then they use salt petre when they kipper them?—Yes, when they kippered them.

That was to give them the appearance of clean fish; but did they kipper them all?—Any that I saw they generally kippered them.

Do you know, from your own knowledge, that a great many fish are killed in the upper part of the river Tay and in Loch Tay, in close time?—In Loch Tay and upon that district; I conceive you will find some clean fish in Loch Tay, all the season of the year; but no clean fish upon the Tummel and the Garry. I have been there protecting the rivers for three months of the season.

What months?—The months of September, October and November; I was wrote to from Perth to come down; I told my master it was of no use to throw away so much money if we did not stay longer, for the fish had been in the pools, and were only just going on the spawning beds; accordingly he wanted us to go back, and at the time we went back again, we examined the fords where the people had thrown the fish off the spawning beds to the shore, and saw them going actually to blaze the water at the time.

Did they fish by torch light?—They were spearing by torch light, on each side, and we took a man actually with the spear in his hand, and took it from him; and one man made a blow at me at the time, and my neighbour kept off the stroke.

What part of the Tay was this in?—This was on the Tummel; the only ford that I saw was there; that was the most destructive one; there was such a destruction, that when we went back, we could scarcely see one fish upon the ford, and we were only two days away.

What is the name of that ford?—Gowlraith, and there is one ford at Dumfolder, and in fact from the mouth of the Gary to Mullincarn, there are several fords all the way down; I superintended all that they were doing; they were pretty plentiful upon the fords at that season.

When you and the rest of the fishers were so successful at night, what part of the river did you fish in when you employed yourself, and were not employed by any tacksman?—From the bridge of Perth to the mouth of the Almond, and several miles above it.

You formerly stated, that you were employed by Mr. James Bell, of Perth, to fish down to as late a period as the 7th of September; did Mr. Bell himself engage you to do so?—He did so.

Did he desire you to make arrangements with the men for this purpose?—Yes.

Did you do so accordingly?—Yes.

How many men did you employ along with you for this purpose?—Twelve men.

Was this after the close time that you made this arrangement with Mr. Bell?—Yes.

Do you recollect the day of the year, or the month, when you made this arrangement?—It was about the 26th of August.

Was it after the 26th?—It was the day after.

On the 27th then?—Yes.

How many days did you continue the fishery with those twelve men?—I continued till the 7th of September.

In what year was this?—The year 1820.

What quantity of fish do you think you took between the 27th of August and the 7th September?—We did not kill very many upon the part that I was on, but there was a good deal killed at Lord Grey's; the number was small where I was.

What quantity did you kill for Mr. Bell?—I think it did not exceed perhaps thirty or upwards, salmon and grilses.

Did

Did you afterwards receive money from Mr. Bell, to pay the men that you employed and to remunerate yourself?—Yes.

Was it from Mr. Bell himself that you received the money?—Not from Mr. Bell himself, but from his overseer.

What is the name of his overseer?—Jacob Burns; it is an overseer that he keeps to pay the men.

Was Mr. Bell at Perth, or where, at the time?—Yes, he was at Perth, and at Aberdeen part of the time; but his brother acted for him.

Did you pay the money for him for fishing between the 27th of August and the 7th of September?—Yes; they had a fisherman upon each water below, that delivered the fish.

Did you see Mr. Bell frequently at that time?—I could not see Mr. Bell because I was up the river; I made an agreement with him, and I afterwards paid the men and received the wages, and likewise the men and I continued fishing before I got orders to give up the boats and nets.

Were those fish always sent to Mr. Bell's fish yard?—Yes, regularly, when the cart came round, I sent them down with the men.

You have stated that a greater quantity of fish were taken at Lord Grey's fisheries between the 27th of August and the 7th of September, than where you were fishing?—Three times the double.

What reason have you to know this?—On account of the river being so small; and when the fish-driver came round I told him to ask what quantity of fish was getting, to let me know how the fish was continuing.

You were told a much greater quantity was taken there?—Yes.

By whom were those fish taken at Lord Grey's fisheries?—William Bell is superintendent.

Who is William Bell?—He is Mr. Bell's foreman.

Was it under his directions that the fishing was conducted at Lord Grey's fisheries after the close-time had begun?—Yes.

Was the fishery carried on in the day time?—Certainly.

From the situation of Kinfaur Castle, Lord Grey's house, would not any body see the fishery going on?—Any person could see it, but I cannot recollect that Lord Grey was there himself; he was often at France, but I cannot say that he was there those days.

You have stated that the fishery in Loch Tay goes on through the year, and affords a cloak for fishing in close time; who is the tacksman of Loch Tay?—I cannot ascertain who is the tacksman of Loch Tay; but Mr. Bell gives so much a pound weight for the fish.

Is Mr. Bell in the habit of buying fish constantly from Loch Tay?—Yes.

Does he buy this fish during the regular salmon fishing, or at close time, or all the year round?—He buys all the year round.

And to your knowledge does he receive fish from Loch Tay all the year round?—I have seen him receive them after the time, and I have seen him receive them before the time; but I was not constantly at the fish house to see them coming in.

You have seen salmon from Loch Tay come in after the close time, and before the fisheries legally began?—Yes.

Are you well acquainted with Proudfoot?—I am remarkably well acquainted with Proudfoot, and he is the only man that wishes to protect the river at the present time.

Did he ever carry on any traffic in salmon in close time?—He did in former times.

When was that?—He has not carried on the practice of fishing himself the last four or five years; his men might have done it, but I do not believe he has done so himself.

Had you ever any transactions with Proudfoot when he carried on that traffic of fishing in close time?—Yes, I have; he came to me one night many years ago, and took me out of my bed, and said he understood there was a number of salmon in the mouth of the Almond; and I said there was a good deal leaping about it; he said that if I would go and fish along with him, that he would manufacture the fish and send them to Edinburgh, for they were doing great things upon the Erne; we went about two miles for another man, and we took a net, and all we got was only four trouts.

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(June 3.)

Had that part of the river been fished before?—It was fished the night before.

Were you one of the people that fished the night before?—I was one of them.

How many did you get the night before?—I dare say upwards of a hundred.

Then Mr. Proudfoot was very much disappointed?—He was at that time.

Did you yourself ever sell foul fish to Mr. James Bell?—I have sold them at the commencement of the fishing in the year 1819; that was the most destructive season that ever I saw; we took eighteen at one haul in the month of December of fish spawning on the spawning beds.

Did you kill all those fish?—Yes, we killed them all and sold the greater part of them at the hauling place; it is a perquisite of our own; and Mr. Bell hearing that they had done so, he desired us to bring the best of them down so that he might inspect them, and accordingly we brought, I dare say, twenty-five or thirty, and he picked the best of them out and gave us ten shillings for them. There was Jacob Burnes, John Wallace and James Young, they were all overseers at the time.

Did you get ten shillings for the whole?—He gave us ten shillings just for what suited him.

How many pounds weight do you suppose Mr. Bell got for that ten shillings?—I cannot ascertain; there were some of them twenty pounds weight.

Did he get two hundred pounds weight of fish?—I could not ascertain how many he took, but he took as many as made a box of fish, six stone weight; he picked out as many as would make a box.

A box generally contains six stone?—Yes.

Where do you imagine that the fish that Mr. Bell bought from you in that way were sold or consumed?—He sent them to the London market.

In ice?—Yes, in ice.

Are you acquainted with the upper part of the river Tweed?—Not very far up; I am acquainted up to the town of Coldstream; I know the river there.

To your knowledge, is there much poaching in that part of the river?—It is destroyed altogether now; my father told me that the river is completely ruined in the close time; they fished regularly all this winter over, just a regular fishing with nets every night; my father is nearly the oldest fisherman there, and he is tacksman to one Mr. Robertson there.

Who carries on this fishing with nets?—Just the fishermen.

Is that done by the orders of their employers or merely for their own emolument?—Just merely for their own emolument; they have fishings up there, the fishermen themselves take them from the gentlemen, and six men have boats amongst them, and they just fish regularly; they assemble and meet in bands; the bailiffs go round, but there are very few to protect them; they meet in bands, and one man cannot interrupt them.

Is that countenanced by the gentlemen of the country?—It is not countenanced by the gentlemen of the country at all; it is the men doing so themselves, and the water bailiff is not sufficient to prevent it. They have the water bailiffs in the Tweed; the lower fishermen that have these fishings break the laws and then the committee at Berwick send men up to Kelso to destroy the nets there, on account of their breaking the laws; if it were a general thing it would be quite different, but some of the fishers below break the laws themselves, and then up at Kelso they think it very hard that they cannot get a good fish.

When the river closes at Perth and that employment is over, what in general do you do?—Sometimes work at one thing and sometimes at another; sometimes I have wrought upon Lord Mansfield's property with the spade or any thing that occurs.

Do you ever go near the Tweed upon that occasion?—Yes, I have been at the Tweed at the harvest these two or three seasons.

When you are at harvest do you ever fish a little?—I have assisted them. I have assisted the fishermen there in taking them.

In the night time?—In the night time.

Have you ever been present when any considerable quantity of fish was caught?—Yes, I have been present when great numbers were caught.

To whom were they sold?—Generally sent to Edinburgh; I was not present

there

James Gillies.

(June 3.)

there that night, but my brother killed in one night four hundred of salmon and grilses, and upwards, at one hauling place.

At what season was this?—It was just after the fishing was done; it was a regular thing done there.

On what day is it done?—For four or five days after the time; they give over by law on the 10th of October; they are generally allowed three days to themselves.

When does the Tay fishing open?—The 10th of December.

Is Lord Grey's fishery extremely productive from the 10th of December till the end of January?—It will not much more than pay the expenses one season with another. Taking the average from the 10th of December till the end of January, it will not, one season with another, pay the expenses, or little more.

Is that fishery very valuable in the month of February?—Yes; Lord Grey has some very good fishings in the month of February; his fishings, called the Stoke Green and the Pyroad, are the only two valuable fishings in the Tay in the month of February.

Do you apprehend that all the fish that are in the river at that time are taken at those fisheries, without being permitted any of them to ascend the river higher?—There are numbers of them get up; they do not take them all there; perhaps in the month of February there will be ten days of those fishings and scarcely take one fish.

You have stated, that in the Tay the fishing commences on the 10th of December; are there not many fish who continue full of roe and spawn, and who have not spawned in that river in the mouth of January?—When I went to Perth first, most of the river was over with spawning at December, but you will scarcely see one fish come there to the *Red* till about the end of November, and the throng time for spawning now, is generally in the months of December and January.

Then do you consider that the fish are later now in spawning than they were some years ago?—Yes, they are; they are better in quality now when they come up at the beginning of close time, than formerly.

They are fitter to be taken?—They are better, and they must be longer time in coming to maturity. We think it is on account of the fish getting later; we have no storm now, and it does not bring the fish forward, you scarcely ever see one going to the spawning bed before the middle of November.

How long do they continue going upon the spawning bed?—I cannot ascertain how long a fish will continue upon the spawning bed, but they will be three months upon the ford.

Do you mean that fish are spawning from the middle of November, for three months after that?—From the middle of November for three months, it will be that time before the spawning is finished. I have often had the experience to see them at Blair Gowrie. You may see all the operation there.

Do you consider then, that you cannot fish for salmon in the Tay sooner than the middle of February, without the chance of taking fish which are spawning?—You will get ten foul fish till the middle of February for one clean one.

When do you think that you could commence fishery in the Tay, without the chance of taking foul fish?—You could not commence before the month of March without taking the foul fish, because the most part of the she fish come down in the month of March from the High-lands. You will see them go down in shoals. The *he* fish always seeks his way down immediately after he spawns, but you will scarcely get a she kelt early in the season. You will get the she fish coming down in the months of March and April, great numbers of them, and you will scarcely get one he fish so late as that month; all the he's are coming down chiefly in the month of February. Now we consider that the she fish have some natural instinct in them, and they abide about the river before the smelts are quickened into life.

In fact, although the tacksman generally forbids his fishermen to kill black fish when they see them, what is the real state of the case, are they all thrown into the river unhurt, or are many of them killed?—The last master I served with was very distinct in giving me orders on that subject; we threw in most part of them; that is, Mr. Brodie, the tacksman of Pitfour fishings, and we were told that if so be we were found killing one of those foul fish, we were

to

James Gillies.
(June 3.)

to be turned from the service; and William Bell, and William Millar below, pay great attention, and do put them in, and if they were to see the men kill any of those fish, I am sure they would put them away; but further up all the destruction is done, as high as at Dunkeld; there is one upon Sir Alexander Mackenzie's fishings, that has killed a very great quantity of them. This year, at the Boat of Caputh, they killed seventeen in one haul.

If those illegal practices you have described as carried on by night and by day, were finally put a stop to, would not a very great increase of fish immediately take place?—It would immediately take place; now the whole river is destroyed at once.

Veneris, 4° die Junij, 1824.

THE HONOURABLE WILLIAM GORDON,

IN THE CHAIR.

Henry Home Drummond, Esq. a Member of the Committee; Examined.

H. H. Drummond, Esq.
(June 4.)

HAVE you had occasion to consider the subject of the salmon fishery of Scotland?—Yes, I have.

Has the salmon fishery of Scotland in your opinion decreased generally?—I know that it has decreased in the rivers that I am particularly acquainted with, and I have heard from other persons, that it has decreased generally.

Which are the rivers to which your knowledge principally extends?—Chiefly the Forth, and the streams that run into it.

Since what time has the decrease principally taken place?—As far back as my recollection goes, the fishings have been decreasing, but more rapidly of late years.

Has it decreased generally, or in particular parts of the river Forth, and the streams connected therewith?—Generally.

Does the salmon fishery exist in the river Forth, both in the fresh water, the tideway of the river, and in the large estuary of the Forth?—Yes.

Will you have the goodness to state to the Committee, the causes to which you assign the decrease of the salmon in the river Forth and the adjoining streams?—I believe that there is a combination of different causes, but certainly I conceive the principal cause to be the want of attention to the laws regulating the close time, and the preservation of the breeding fish and the fry; among other causes, I conceive one leading one to be the increased value of the salmon, which induces those who fish in a legal way to exert themselves to the utmost in catching the fish at all times; as the fishings have diminished, the diminution is of course most perceptible in the small fishings that belong to the upper heritors; thus their interest in the fishings is reduced very low, and it happens unfortunately, that they are the persons who have chiefly the means in their own hands of preserving the breed of fish. In the present state of things, it is clearly my opinion that it is necessary to extend the close time through a longer portion of the year, and that some system must be adopted to prevent the destruction of the spawning fish, and of the fry; I am not of opinion that the mere raising of the penalties to a higher amount would be attended with any very great advantage; what is wanted is an informer or prosecutor, and the difficulty here appears to lie in what I have already mentioned, with regard to the diminished interest of the upper heritors in preserving the brood.

Is it your opinion that if the breeding fish and fry were protected, and the close time extended and strictly observed, there would be a great increase of fish in all the rivers?—I believe if those objects were fully attended to, there would be a prodigious increase.

Do you then consider, that with all the skill and industry of the lower fisheries, a much greater portion of fish would go up the river and be the property of the upper heritors?—Undoubtedly.

Will you be pleased to state, whether there is any plan which you can recommend

commend as more likely, than the existing law, to protect the brood of the fish? —Certainly I do think that many amendments of the existing law might be made with that view. I conceive, that persons fishing with intent to kill salmon in close time might be made amenable to punishment, which they are not at present; and that in some cases, the oath of one witness might be held sufficient to convict. It would be necessary to appoint persons to watch the breeding fish, and the descent of the fry, from trespsasers; but the difficulty here arises from the expense; there is no mode of defraying the expense of preserving the brood, without an assessment on all the fishings in the river; for I am afraid the upper heritors, and those whose property lies near the places where it is necessary to preserve the brood, will not be induced to submit to so much trouble and expense. *H. H. Drummond, Esq.* (June 4.)

Would it be part of your plan, that an assessment should be made on the proprietors of fisheries generally in the river, and in the estuaries, to be paid according to the value of those fisheries?—That is my opinion as to the principle on which it should be conducted.

What species of police occurs to you as the best calculated to answer the end which you propose?—I think there must be persons regularly appointed to attend to that duty who have no other avocations.

Such as water-bailiffs?—Such as water-bailiffs.

Is that the case now?—I believe not, excepting in the Tweed and the Solway, and the rivers running into them; for there is no other river in any part of Scotland regulated by local acts.

Do you wish to suggest any other mode of protecting the fish in the river?—I think that the law that requires a constant slop, or break, in all dam dikes across the rivers to be observed, should be strictly enforced; and if the rights of cruive fishing could be abolished, by bargains with the owners of them, or by the operation of a statute, allowing, of course, compensation to be made at the expense of those who are to gain by their being removed, this would tend very much to increase the brood of fish, by opening the rivers, not only for the ascent of breeding fish, but for the descent of the fry. I believe that noxious matter, proceeding from various trades and manufactories into the rivers, to be very injurious to the fish.

Do you think any quantity of floating peat moss is injurious to the fish in a river?—I believe it to be troublesome to the nets in fishing; but certainly there is nothing noxious in the nature of moss to the fish.

Does not the moss itself, floating down the river, spoil the breeding beds?—Certainly not in the Forth. The fish all breed above the place where the moss is floated into the river. The moss is floated into the Forth, in which no salmon ever breed; and the salmon that frequent the Firth of Forth, are bred in the Teith, the Deom, and other streams that run into it.

James Gillies, again called in; and Examined.

IS it consistent with your knowledge, that a great quantity of the salmon fry is destroyed by rod-fishing?—Yes, there has been a great deal destroyed by that; but when the fry is coming down, when we see them appearing in the water at Perth, we put the town-serjeants round to give information, that if any person is found destroying them, they are to be punished according to law. *James Gillies.*

In point of fact, are a great number destroyed?—Yes; I have seen great baskets full of them destroyed in the water of Almond, and I have taken part of them from them, and shown them to my master.

But as to rod-fishing, was that a great cause of destruction to the fry?—It is not material; we soon prevent it. No gentleman, after he knows that the intimation goes round for not taking them, no gentleman fishes; it is only a few poachers, and we soon get the better of that.

You stated that there is a great deal of poaching in the fishery of Sir Alexander Mure M'Kenzie, at Caputh?—Yes.

Do you know if a similar practice is carried on in the Tay, above the junction of the Almond?—As far up as above Dunkeld; it is a regular practice for a number of years back.

To fish during the close season?—Yes, with rods all the day, and likewise fishing at night.

Do you mean that it is done by poachers, or by fishers who are employed to

James Gillies.
(June 4.)

fish in the close time, under the authority of the owners of the fisheries?—It is not done by any of them, but men take the liberty of doing it.

You mean poachers?—Poachers and fishermen.

The proprietors do not look about as they ought?—No; when within fourteen days of the time of opening, I have known fish come from the Lynn of Campsey.

Did you ever hear of an agreement between the proprietors and the tenants of the upper fisheries of the Tay, to fish three weeks after the close season?—They were wishing to do that, but Mr. Richardson of Pitfour would not agree to it.

Is it a regular practice now to begin to fish fourteen days before the close time expires?—No; but they have done it for a number of years back at the Lynn of Campsey.

You have stated, that Mr. Bell, the tacksman, employed you to fish after the legal time was passed; to your knowledge, has no other tacksman but Mr. Bell been guilty of the same proceeding?—The very same; Mr. Richardson and Co. and Mr. Proudfoot. All the companies in Perth agreed to do the same.

Do you know if a similar practice is carried on in the North Esk?—It is only by information that I have got at it, that the same practice is carried on there; but it is only hearsay. I never experienced that, it is only by information from my brother.

Is there a considerable portion of these fish you have mentioned as having been caught in the Tay, in the close time, foul fish, or are most of them clean fish?—You will get them of all descriptions, but most of them are foul.

What is your opinion, generally, regarding the fishing of the rivers in Scotland?—If they do not stop at the 26th of August, and not commence again before the middle of February or March, when the fish are done depositing their spawn, and the mother fish returns to the sea again, in my opinion the rivers will grow barren altogether. The excisemen, in looking for whiskey, have got cartloads of fish, and seized the carts coming in six weeks after the season.

Do the observations you are now making, apply to the Tweed?—Yes; the Tweed is just as bad as Perth.

Do you know that it is the practice to fish at the cruives in the river Erne, in the close time?—I had agreed with Mr. Proudfoot, at the end of September, to protect the Erne fishing, on account of the destruction done there, and he went along with me, and one Stewart who agreed for the same purpose, and we came to a boat and net within the water mark. Mr. Proudfoot and Stewart went up to the cruives to see if they were set in the way of taking the fish going up to spawn; they found them so, but could not venture in on account of so much fresh in the water.

How long was this after the close time commenced;—This was in the end of September; that is, more than one month.

Had the river been low enough in the interval to allow them to take out the cruive?—Yes; it was in the night that we were there. Mr. Proudfoot and Stewart came back to me again, and we consulted what to do; we looked at the boat, and there was no name upon it, and as Mr. Proudfoot had been in the habit of killing many fish in that hole in former times, he consulted for to take the boat off and the net; we sent it to Perth; we took it to the bridge of Erne, and put it upon a cart, and carried it to Perth.

Whose boat was it?—Lord Kinnoul's factor sent word to us, that if it was not sent back, it being Lord Kinnoul's property, he would prosecute us according to law.

Did you send it back?—Some of the Perth company were for sending it, and some were not. But on account of its being Lord Kinnoul's, we all agreed to give it back again.

Were the net and boat returned?—Yes, we were all summoned to Perth, and as Mr. Proudfoot did not attend to give his defence in, he was fined five pounds, which was given to the poor.

George Little, Esquire, again called in; and Examined.

George Little, Esq.

ARE you acquainted with the new erection upon the river Annan, which extends from the mill dam below the bridge, to the opposite shore?—I am acquainted with an erection upon the river Annan, which extends from the mill dam

George Little, Esq.

(June 4.)

dam below the bridge; but it is not a new erection; it is not my opinion that that erection stops the fish from going up the river, for the tide flows over it.

Do you say that the tide flows over it?—There is an opening in it, and the tide flows over it. There is a cawl erected on the estate of Castle Milk on the river Milk, which is a tributary stream to the Annan. This cawl or dam dike is so constructed, that no salmon can get over; a great number of salmon used to go up there formerly to breed above that cawl, but of late years there has been none seen; numbers of salmon come to the cawl, and a number of poachers go to kill them there.

Is there any other interruption either on the river Annan, or on any of its tributary streams, which tends to the destruction of the brood of salmon?—I know of none but the mill cawls, which are in general of the same effect as they are on other rivers.

Has the witness a knowledge of the river Esk, in Cumberland?—Yes.

Are there any interruptions in that river, such as have been described?—No, I do not know of any that there is, except some mill cawls upon it.

Is the witness acquainted with the river Eden?—Yes; these all fall into the Solway.

Will you inform the Committee whether you know of any interruption upon that river?—I do not know of any except the mill cawls. There are a good number of mills and different manufactories on the Eden, and the tributary streams. On the Esk they are chiefly mill cawls, but on the Eden, or rather on its tributary streams, many of the cawls are attached to manufactories.

Does the witness know whether, from the temperature of the different rivers flowing into the Solway, it would be desirable to have the period of close time varied between the one and the other?—The Eden is earlier than the other two, than either the Esk or the Annan; the fish enter it earlier than they do the others.

How much earlier?—Nearly six weeks.

Your opinion would be, that the close time in that river ought to be fixed six weeks earlier than in the other rivers?—It is; my opinion respecting the Solway and the rivers that fall into it is this, the Solway, the Eden and the river Dee at Kirkcudbright might commence on the 2d of February, and the Annan, the Esk and the Nith should not commence earlier than the middle of March.

Your opinion is, that the shutting of the river ought to be in proportion?—Yes; the salmon that are caught in the Dee are quite out of season fully a month before they are in the Nith and the Annan; these are two very late rivers.

Have you at any time in London examined the dried salmon in the shops?—Yes.

Do they generally come from Wales?—A great number of them do.

You can judge, even when they are in that state, whether a fish has been caught clean or foul, or in spawn?—When a salmon is in bad condition he is very thin in the belly, and a great number of these kippers are in bad condition. Edinburgh and Glasgow are supplied with an immense number of kippers killed in close time.

Almost all the fish taken out of condition are cured in this way?—They do not usually begin to cure the fish as kippers until the close time commences.

Appendix, N° 3.

PAPER delivered into The Committee, by Sir Humphry Davy,

ON THE SALMON FISHERIES.

Appendix, N° 3.

1. THERE are two species of the genus *salmo*, caught in the salmon fisheries of Great Britain and Ireland.

The first, *Salmo* Salar, is by far the most important, as an article of food and commerce. It is distinguished from the second, *Salmo* Eriox, by its greater size when of the same age, by possessing a smaller and more pointed head, a more slender tail, a greater diameter in proportion to its length, fewer and smaller spots, and other characteristic marks well known to the water clist, but which it would be useless in this place to describe.

The salmo salar is the common *salmon*; the salmo eriox is known by different names in different districts, such as salmon peal, sewen, bull trout, but its most correct appellation is sea trout.

These two species, when of the same size, are sometimes confounded by ignorant persons; but without minute examination, they are easily distinguished by an experienced eye. There is a very remarkable difference in their habits; the stomach of the sea trout is generally found full at the time of its migration from the sea, whilst that of the salmon is as generally empty.

2. Fishes in general multiply their species by eggs, which are impregnated out of the body; and which require the contact of water saturated with air to render them productive.

Fishes that spawn either in the sea or lakes, almost always come to the shallows and deposit their eggs upon vegetables, which by their agency keep the water saturated with air, and their season of breeding is in general that of most animals, in the spring; but the salmo genus, (I speak of those individuals belonging to it, the habits of which are well known, and which are the subjects of this evidence) multiply their species in winter; and they require *running* water for this purpose, *water saturated* with air. It has been proved by the experiments of M. Jacobi, that the egg of a salmon or trout impregnated, will not produce a fish in still unchanged water; and that for this purpose, it must be constantly washed by fresh portions of water, in a rapid stream or under a fall.

3. These circumstances show the necessity for that wonderful instinct of the salmon, which, preparatory to the breeding season, quit the sea and make their way through rapids, over falls, and through great lakes to the upper parts of rivers, where their eggs may be deposited in a pure aërated water.

The salmon requiring much food, and depositing a large quantity of spawn generally occupies large rivers, having a number of tributary streams. The sea trout, on the contrary, though found in large rivers, is more common in small ones, and scarcely ever penetrates so far into the interior as salmon. Sometimes, indeed, in very small streams, it deposits its spawn almost close to the sea, in gravel, where the stream meets the waves at high water mark.

The different habits of the salmon and sea trout are well demonstrated in the Moy, near Ballina, in Ireland. There is a large pile in this river close to the town, and below the fall a considerable stream joins the Moy. The salmon leap this fall; the sea trout almost all spawn in the smaller stream, a few miles from the sea.

4. Salmon begin to run up rivers generally in March, and continue migrating from the sea till October or November; but in the early spring, there are few in motion. In June and July they migrate in great number, and so in August and September, but this depends upon the seasons, and particularly the quantity of water in the river; the large fish seldom leave, except in floods, unless late in the year, and the one year old fish are almost always most abundant in large rivers in July The sea trout in respect to their breeding season, agree with salmon; but the period of their migration is usually later, particularly in small rivers.

The

The fish that come soonest into the water breed first: salmon have been known to spawn in the end of October, and I have seen them full of ova, even in March. It is stated, that the eggs produce young ones in about six weeks; and the young fish, when they have reached the size of smelts, take the opportunity of the first flood to go to the sea or brackish water. Their great migration downward is in March, April, and the beginning of May.

There is much reason for believing that the young salmon do not immediately go far from the river into the sea: for in August and September a fish exactly resembling them in form, and from ten to fourteen inches long (called whitlings and whitings) without visible ova or spermatic secretion, are found in salmon rivers, a mile or two from the sea, and which return to the sea without attempting a further migration. This seems to be a sort of glimmering of that instinct which, the next year, when they are fit for propagation, carries them, with an irresistible impulse, into fresh water, and to the most remote sources of it. The salmon of fifteen or eighteen months old is called, in Scotland, Grilse. Grilses differ in size probably from their different ages; those spawned first, under common circumstances, being of largest size.

The female fish, in spawning, deposits her eggs slowly on gravel; the male sheds a white seminal liquid upon them, and both fish cover the eggs with gravel. The male is most active in this operation, which hardens the extremity of the mouth, and bends it into the form of a hook.

As soon as the fish have spawned, they begin to move towards the sea, and take advantage, after they have somewhat recovered their weakness, to escape by the first floods, in February or March. The grilse that has spawned, after returning from the sea, is called a salmon. The growth of salmon, in the sea, is not accurately known, but they seem to double their weight in a season.

5. There is a general complaint of the diminution of the salmon in fisheries. In the Thames, it can scarcely be said to exist; and even in the Avon, the Severn, and the Trent, it is becoming comparatively a scarce fish. The great northern fisheries, and the Irish fisheries, are much less productive than formerly.

The simple remedies for this national evil are:

1. To suffer more fish to spawn, and fish of all ages and sizes.
2. To prevent any fish from being killed in rivers after spawning.
3. To prevent the young salmon, or salmon fry, from being killed.

As salmon, and salmon trout, belong, in fact, to the river in which they were spawned, and as each variety of salmon, or salmon trout, affects a particular river, and always returns to it; and as the old law of the country was framed upon this principle, salmon fisheries never having been considered as belonging to the coast, all stake fishings should be abolished, as they enable persons having no interest in the river to cut off almost entirely the supply of fish; for salmon do not go far out into the sea, and always return along the coast, scenting out, as it were, their own river: and a strong net put across an estuary might destroy, in one year, the whole fishery of a river.

No cruives or wears preventing the running up of fish should be allowed; that is to say, no close ones, but there should be always a free passage for fish, so that early fish may go up as well as late fish.

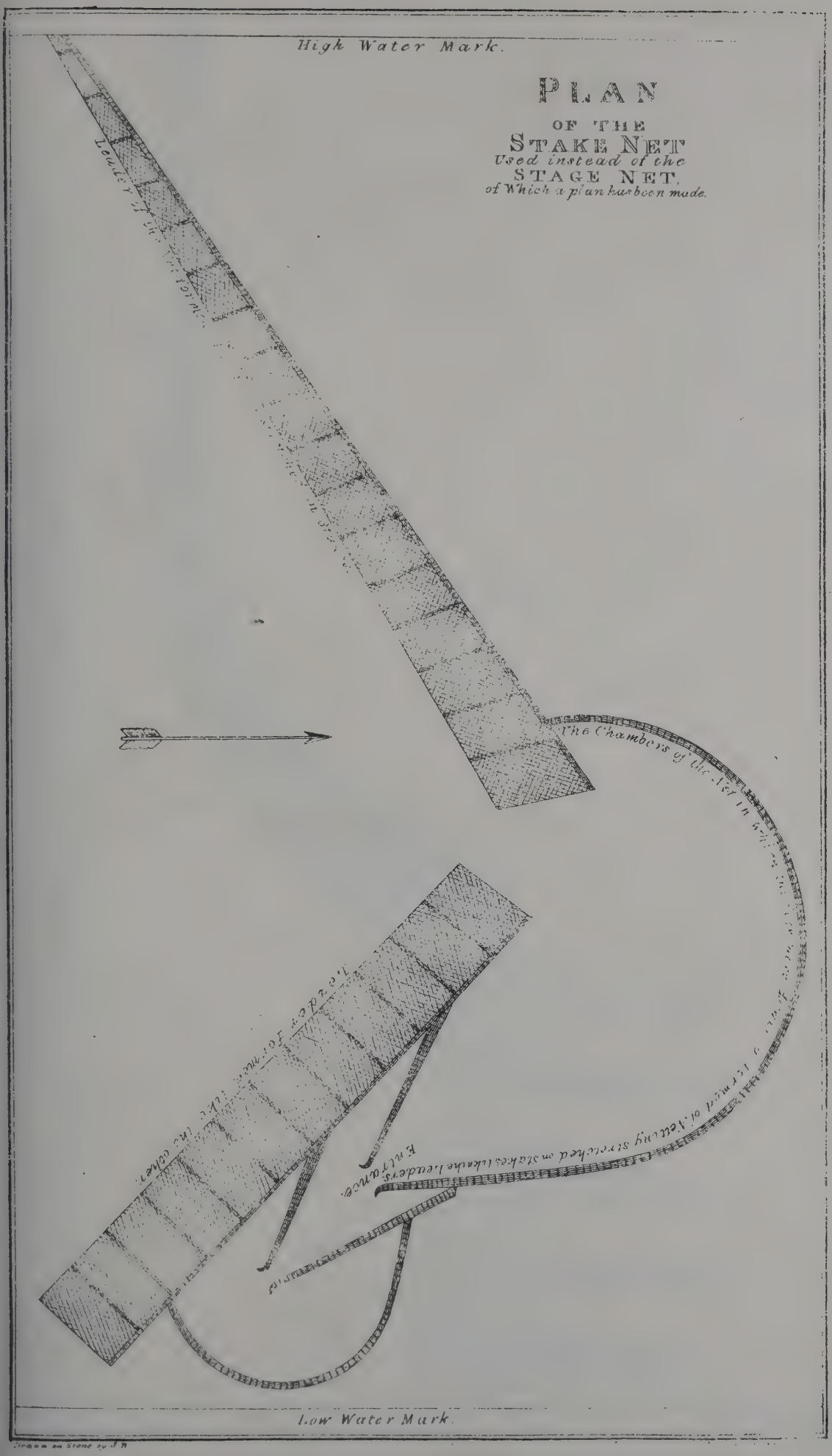
No burning should be allowed in a river by which all spawning fish may be killed.

Nets should be limited to a certain size, so as to render it impossible to sweep a river.

No angling should be allowed in salmon rivers till May, and not after October.

The period of close time should be extended.

May 8, 1824. *H. Davy.*


High Water Mark.
PLAN
OF THE
STAKE NET
Used instead of the
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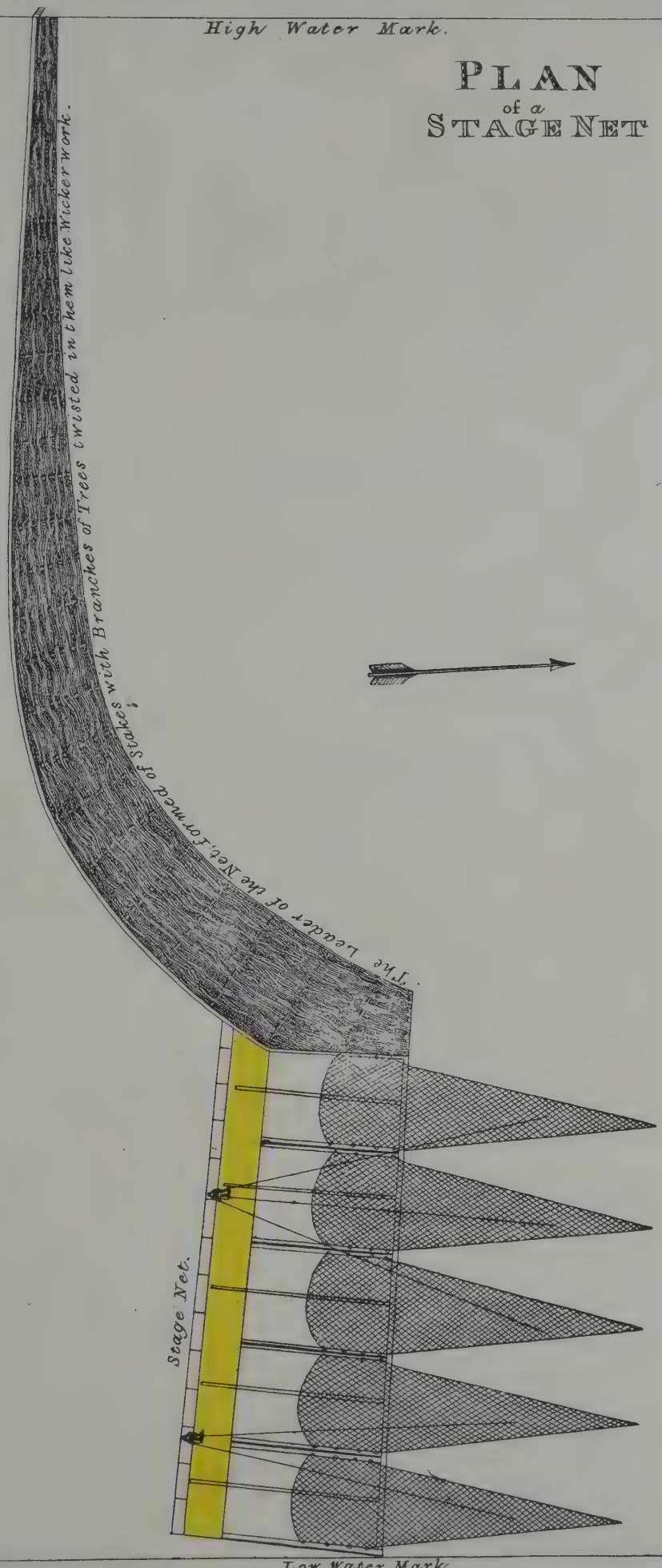
of Which a plan has been made.
Low Water Mark.

PLAN
of a
STAGE NET


High Water Mark.
The Leader of the Net, formed of Stakes with Branches of Trees twisted in them like Wicker work.
Stage Net.
Low Water Mark

The Stage in which the Fisherman stand is colored Yellow.

Drawn on Stone by J. B.

Printed by W. Chater & Co.

427

17 June 1824

REPORT

FROM THE

SELECT COMMITTEE

ON THE

SALMON FISHERIES

OF THE UNITED KINGDOM.

1825.

Ordered, by The House of Commons, *to be Printed,*
30 *March* 1825.

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No. 4.—Plan of the Lower part of Tweed.

REPORT.

THE SELECT COMMITTEE appointed to take into consideration the State of the SALMON FISHERIES of *Scotland*, and of the United Kingdom, and the Laws affecting the same; and to report the MINUTES of the EVIDENCE taken before them, together with their opinion and observations thereupon, from time to time, to The House;—HAVE considered the same, and agreed to the following RESOLUTIONS, which, with the MINUTES of the EVIDENCE hitherto taken, and DOCUMENTS connected therewith, they have directed to be reported to the House:

THE Committee beg to state that the Resolutions are founded partly upon the Evidence taken in the last and present Sessions of Parliament, but materially also upon a minute inspection of the Returns received in answer to the Queries sent in the last Session of Parliament to all parts of the United Kingdom, which are necessarily so voluminous, and so various in form and substance, as to render them unfit to be presented to the House. In reporting these Resolutions, the Committee have been desirous to make known as soon as possible the result of their investigations, upon some of the least difficult branches of the inquiry committed to them, with the intention of continuing their researches into the more difficult, but very important parts of the subject.

1. *Resolved*,

THAT it is the opinion of this Committee,

That the Salmon Fisheries of the United Kingdom of Great Britain and Ireland have for many years past rapidly decreased, and that there is every reason to apprehend that they will be diminished still more rapidly, unless effectual measures be resorted to for their preservation.

2. *Resolved*,

THAT it is of the utmost importance that the fence months, or close time, should be extended, and should commence and cease at the same period in all the Salmon Fisheries of the United Kingdom of Great Britain and Ireland.

3. *Resolved*,

THAT the taking or attempting to take, the having in possession, the selling or purchasing Salmon, Grilse, Sea Trout, Botcher, Whitling, Whiting or Finnock, during the fence months, or close time, ought to be declared illegal, and to subject parties offending to a penalty.

4. *Resolved*,

THAT during the Fishing Season there ought, throughout the Rivers, streams, lakes, estuaries and sea coasts of the United Kingdom of Great Britain and Ireland, to be a close time weekly, commencing at sun-set in the evening on Saturday, and terminating at sun-rise on Monday, guarded by such penalty as may be deemed sufficient.

5. *Resolved*,

THAT it ought to be declared illegal, maliciously to injure or molest in any way the Salmon, Grilse, Sea Trout, Botcher, Whitling, Whiting or Finnock, when in the rivers, streams, or in the lakes, during the fence months or close time, or in any way maliciously to injure or disturb the spawning-beds, banks or shallows, and to subject parties offending to a penalty.

6. *Resolved*,

6. *Resolved*,

THAT the owners or occupiers of mills or other buildings, for the benefit of which water is taken from a river, stream or lake, in which Salmon exist, for the driving of machinery or any other purpose, ought to be required to erect and maintain such gratings or fenders as shall be sufficient to prevent Fish, going from or returning to the sea, from entering the stream so taken from the main current; a specific description of such fender or grating to be furnished for their regulation: the maintenance of such fender or grating to be enforced under a penalty.

7. *Resolved*,

THAT it is indispensable to guard against the admission into all rivers, streams, estuaries and lakes, in which Salmon exist, of any matter proceeding from manufactories of any description which is known or deemed to be poisonous or deleterious to Fish.

8. *Resolved*,

THAT the use of lights in taking Salmon, or any other species of Fish, ought to be declared illegal, and to subject the parties offending to a penalty.

9. *Resolved*,

THAT the size of the meshes of all nets used where Salmon Fisheries are carried on, ought to be regulated.

10. *Resolved*,

THAT there ought to be established on each river and estuary, including such streams, lakes and coasts, as may be connected therewith, such number of conservators or water-bailiffs as may be necessary, proportioned to the value of the Salmon Fishery, for the purpose of giving effect to such regulations as are or may be provided by law; the expense of such establishment to be defrayed by the proprietors or lessees of Salmon Fisheries in the proportion of their respective interests, and to be compulsory upon all persons having legal right to Salmon Fisheries; the conservators or water-bailiffs to have right to traverse and inspect the banks of all rivers, streams, lakes, estuaries and coasts, within their respective districts; to inspect all weirs, cruives, dams, mill-streams, and mills, &c. with power to seize and destroy all nets or other engines used for or calculated to kill Fish, in any way or at any time, contrary to law.

11. *Resolved*,

THAT a process at law ought to be established by which the summary conviction of offenders may be had.

12. *Resolved*,

THAT the Chairman be instructed forthwith to move for leave to bring in a Bill or Bills to carry into effect the foregoing Resolutions, throughout England Scotland and Ireland respectively.

30*th March* 1825.

APPENDIX.

Appendix, No. 1.

MINUTES OF EVIDENCE.

Lunæ, 21° die Martij, 1825.

THOMAS F. KENNEDY, ESQUIRE,

IN THE CHAIR.

Mr. Evan Provert, called in; and Examined.

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WHERE do you reside?—I reside at present at Worcester.

How long have you resided at Worcester, or in that neighbourhood?—I have resided since the year 1805.

What is your profession?—Now I am in no profession; for some years, a great part of my time, I kept an academy at Kampsey, about four miles below Worcester.

What opportunities of knowledge have you had respecting the salmon fishery?—By fishing ever since I was a child up to the present day, more or less, in every part of the river, from the source to the mouth.

What river?—Both rivers, but more particularly the Wye; they both rise in the same mountain, the Wye and the Severn.

Respecting what parts of the rivers Severn and Wye are you able to give information to the Committee?—Tolerably well from the sources to the mouths of both.

Does the fishing season commence at the same period in the Severn and the Wye by law?—I believe it does by law; the close time commences in August, and I believe it opens again in November.

Have you occasion to know whether there are fisheries in the Severn nearer the sea than the limit which you have assigned to your own knowledge?—Not to my own knowledge lower than Frampton; that is the lowest place, and the most destructive of any place on the river.

Then is the Committee to understand that you have it in your power to give information respecting the whole course of the rivers Severn and Wye, where there are salmon fisheries?—Yes, I believe I can; I have no hesitation in saying that I can.

At what season do the salmon begin to ascend either of those rivers for the purpose of spawning?—At different months in the year; there is no one definite fixed month that they leave the sea.

What is the earliest time at which the salmon begin to ascend the river for the purpose of spawning?—In the Severn they leave the sea as early as November, and with respect to the Wye they are nearly the same.

Are they in November far advanced towards spawning; are they heavy in spawn?—In the upper part of the river they are absolutely spawning, then about Middlehurst in the Severn, and about Rhayader in the Wye.

You have stated that fish ascend the river in November?—As early as November.

At what time do the fish that ascend at that time spawn?—About September, October or November following.

Then do you conceive that the fish spawning in November have been twelve months in the river?—Yes; they are in a very exhausted state when they are spawning; and when they leave the tide to ascend the river, they are what are called in full season; they are in the finest possible season that they can be in when they leave the tide below Gloucester.

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When the salmon ascends in November, is it not then advanced and heavy from the spawn?—No, there is no spawn in them then, and there is not for perhaps a month or two after they enter the river; and that is the least thing in the world, the spawn itself is smaller than turnip seed.

At what time do those fish become heavy in spawn?—They become heavy about October or November; the earliest I ever killed was the 1st of November, in the act of spawning.

Twelve months after they ascend?—They come up about Christmas, between November and Christmas, and they continue in the river till spawning time.

How long do they continue in the river?—Till the October or November following, when they spawn.

Do fish ascend the river at other periods of the year?—Yes.

At what period?—The principal come up about March and April and May.

In what condition are they in March and April and May?—Best, when they come up fresh from the tide.

In best condition for the market?—Yes.

If the fish that ascend in March, April and May happen not to be caught, at what time do they spawn?—In November, December and January following.

Then do you consider that it is the same thing at what period they come up, but that they all spawn in November and December?—No, because there are different species of salmon; I know five or six different species myself, though all of the same genus; and in the Wye of late years, I was much astonished to hear that there are some that spawn in February or March. I was told by a fisherman the last time I was there, that they came up spawning in February and March; those must be a distinct species of salmon.

What reason have you for saying that it is a distinct species of salmon?—The same as I would say there are distinct species of horses, from a pony to a cart horse, they are the same genus, but of a different species.

How do you account for one fish remaining twelve months in the river before it spawns, and another only three; do they come up in similar condition originally?—They come up in similar condition originally from the sea, as nearly as I could distinguish, but the fry that are going down now about the length of my finger, that were spawned last December and November, they come up in July and August about three or four pounds weight; they proceed up the same as their parents, and they spawn there every autumn in November and December, and then immediately return to the sea.

Is there a considerable quantity of salmon destroyed by spearing?—A vast number; a prodigious quantity; almost the whole.

Does that take place during the spawning time?—During the spawning time only.

A great number of salmon are destroyed by spearing during the spawning time?—Immense quantities.

That is the case in all the rivers of which you have been speaking?—Yes.

Is there a great quantity of fry destroyed in descending the river?—Yes.

How is it destroyed?—With small mesh nets.

Are those nets fixed or moveable?—Moveable, they drag them along; some are fixed I am told.

Are there any fixed nets or machinery of any sort used for destroying the fry in their descent?—Yes, there are fixed machinery in weirs, puts or wheels, across the river Severn.

Is that fixed machinery very destructive to the fry?—Uncommonly; that has been a great source of destruction, they take millions in a night.

Are those nets set for the express purpose of taking the fry?—Exactly.

Are there weirs in those rivers?—Yes, a great many.

Is there a considerable number of salmon caught in the weirs?—It cannot be otherwise; they cannot pass the weirs.

Do you know that the weirs are there?—They were there lately.

When did you see them there?—I saw them two years ago last August.

Was there a considerable number of salmon caught in them?—Prodigious quantities.

Are those clean fish?—They are always in best season going up, and when they are coming down they catch them also, in an exhausted state.

They catch both clean fish and fish out of season?—Every thing is fish that comes there.

There are a considerable number of foul fish destroyed in those weirs?—Prodigious quantities.

Is there any other mode used of destroying salmon?—No, I do not know of anything; angling and netting are fair.

Are the weirs erected for the purpose of killing the salmon, or for other purposes?—For the purposes of turning the water to wheels to grinding or iron-works; there is an Act of Parliament for regulating a weir called the Duke of Beaufort's weir.

With respect to close time, what is your idea as to the proper months that would suit both rivers for the close time?—Beginning with August up to November, but I think it should take in November and December also.

You state that in the rivers Wye and Severn the fish go up in December and November for the purposes of spawning, would it not be advisable to extend the close time over the months in which those fish return to the sea?—Exactly so.

Then when are the rivers clear of these fish?—The months they are most full of good fish are the months of January and February till the August following.

Mr. *William Griffiths,* called in; and Examined.

WHERE do you reside?—At Gloucester.

During what period have you resided at Gloucester?—Nearly the whole of my life, sixty years.

What is your profession?—An attorney.

What opportunities have you had of knowledge respecting the salmon fisheries?—About the year 1801, in consequence of the great complaint of the destruction of Salmon, and the very short supply we had in the Severn, an association was formed at Gloucester, for which I was professionally concerned, the object of which was to enforce the then existing laws; and from that time to the present I have paid a good deal of attention to the subject of salmon fisheries in the different rivers; I am very much connected, not only with the Severn, but also with the Wye and the Usk, my own paternal property being near the Usk.

Are there any particular parts of the Severn and the Wye with which you are particularly acquainted, or do you wish the Committee to understand that your knowledge extends generally to the rivers Severn, Wye and Usk?—I have little knowledge of the upper part of the Severn, or of the upper part of the Wye; what communication I have had is more perhaps with the lower parts of the Severn, the Wye and the Usk.

Within what limits would you say that your information extends?—From general conversation, I might say throughout the whole of the rivers; I have no local knowledge of the upper parts.

Within what limits, geographically speaking, would you say your information extended?—I should say not beyond Worcester upwards on the Severn, and as to the Wye perhaps from Ross downwards.

At what period does the salmon fishery in the Severn and the Wye commence annually?—By a local Act for the Severn, we commence on the 1st of November and continue till the last day of July; our regular fence months in the Severn are August, September and October.

What is the date of that Act?—That was an Act of 1778, for the better regulation of the fisheries on the Severn.

Is that the latest Act?—Yes.

What rivers does that Act apply to?—The Severn and Verniew.

At what season do the salmon begin to ascend the rivers, with which you are acquainted, for the purpose of spawning?—I apprehend at different periods; I conceive that in the Severn they are going upwards for spawn from early in August, and continue perhaps till January; and in the Wye, I believe about the same time.

At what time in the Usk?—In the Usk I think rather later.

At what period?—In September I believe, but I do not speak with great confidence on that subject.

At the time they commence ascending the river for the purpose of spawning are they in an advanced state; are they heavy in spawn?—Certainly not, when they begin.

What is the quality of the salmon at that time?—The quality of the salmon is certainly not equal to what it is at an earlier period, but still it is a fair eatable fish.

At the time that you state the salmon to commence ascending the river for the purpose of spawning, are they in considerable numbers?—At that period, we have

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in the Severn mostly the bocher, which is a young fish that has been down the river and comes up from four to six or seven pounds weight in the same season. There are many fish certainly that come up during the month of August; they fall off in the month of September.

At what period do the unspawned fish appear in considerable numbers in the river Severn?—I should say from the month of September to Christmas, and till January.

During the month of January, what proportion of the whole fish in the river do the salmon going up to spawn bear to those which are in a perfect and marketable condition?—I apprehend that in the lower part of the Severn, there are very few in January other than perfectly good fish; there are very few of the old fish that go up at that period: what fish we have in the great fisheries of the Severn are for the greater part of them what we term new wholesome fish.

Are there not in the month of February, a considerable number of fish which have not spawned and will still during that season ascend the river for the purpose of spawning?—I certainly have had very little practical knowledge, but I should imagine very few indeed in the lower part of the Severn.

In the upper parts of the Severn how is it?—I should suppose the upper parts of the Severn must be full of unspawned fish at that time.

Do you imagine that in the month of March there remain still unspawned fish in those parts of the Severn?—I cannot take upon me to answer that question; I should think there were very few; I should suppose they are mostly spawning in the month of February.

Are there in the month of January many salmon which have spawned, and are then on their return to the sea?—I imagine not.

At that period where are the salmon which have spawned in the upper parts of the river?—I should suppose that they have not left the upper part of the river so early as January.

Do you imagine that they have left the upper parts of the river in February?—I should suppose they begin to leave them about that time.

Do you imagine that all those fish have left the rivers in March?—I should think they have not all left in March.

What is the condition of such fish as have spawned in the upper parts of the river, and remain there previously to their return to the sea?—I should think extremely lank, and in a very bad state.

Is it consistent with your knowledge that those fish must return to the sea and remain in the sea for some time before they can regain a healthy and a sound state?—I conceive that that is manifestly a well known fact.

You have stated that the fish ascend in August and September and October for the purpose of spawning; at what time do you consider that those fish actually spawn in the upper parts of the river?—I really am not competent to answer the question, as I have never paid particular attention to the spawning.

Can you state at what time the fish that have ascended in August and September return to the sea, having spawned?—I really cannot with sufficient accuracy take upon me to give any information as to that.

Is the Committee to understand so far as your knowledge extends, that during the spawning season sound and marketable fish are to be found in the rivers?—There certainly are some, but the proportion is small prior to January. In January and February, which are the more immediate spawning season, there is a very good supply of wholesome healthy fish in the river. I am led to believe that the best fish we have in the river at all is in the months of January and February; and it has been observed to me, that a fish of the same size will really weigh more in those months than it would in any other months.

You speak now of the limited part of the river to which you before confined your observations?—Yes.

Is it the practice at present within your knowledge, that in taking those sound fish, which you say are of good quality, fish of an unsound quality are usually taken?—They are perpetually taken; and we press upon the fishermen that they would, when they see an old fish, return it into the water, but the fishermen call them their perquisites, and you cannot induce the fishermen to throw them aside.

You consider that however desirable it is to save the unhealthy fish, in taking the sound fish, it is in practice impossible to secure that selection and separation?—You cannot do it I think; that is a point I have more particularly thought of than any thing else.

Do you therefore in point of fact state, that large quantities of bad and inferior

fish are taken at the season that the fish which you state to be of very fine quality are procured?—I should distinguish between times: I think that before Christmas, that is, before the month of January, is the time when the great destruction takes place of the old fish. That during the months of November and December the proportion of fish going up the river of the old fish is very great beyond that of the healthy fish; the proportion of what we call new fish is very small to that of old fish, but after December I apprehend that the proportion of new healthy fish is much greater than of the old fish going up. There is very little of the old fish going up after December.

Fish that have spawned in November and December must be returning to the sea at a subsequent period, you have stated in January and February, and you believe in March they have not all returned from the river; does your observation that it is impossible to save the inferior fish, taking the best, apply also to the inferior fish upon their return to the sea?—Yes, certainly.

It is equally impracticable to separate the bad fish on their return to the sea, as it is to separate the bad fish on their ascent, in the earlier part of the season?—Certainly.

Can you state at what season the salmon fry descend the rivers with which you are acquainted?—About April and May.

Do they not descend at an earlier period?—I am not sure; we certainly do meet at Ross with very delicate fish of that description about that period.

Do you conceive that a great quantity is destroyed in its descent?—I believe that a great destruction of the fry arises from the puts which we have in our river.

What is the nature of a put?—I believe it is a kind of basket which is used principally for the purpose of taking shrimps, and it also receives the fry of salmon in a very small state, and then the fishermen select their shrimps; and as to the fry of salmon, that is I believe in general thrown aside, given to their pigs.

Is it consistent with your knowledge, that a very large quantity of fry is destroyed in that way?—I fear there is a very considerable proportion; I understand from fishermen that is very much the case.

Are those puts placed with the intention of killing the fry, or is that a consequence only?—A consequence only.

The object is to take the shrimps?—Yes; being intended for one object they operate against the other.

Are there any other means of which you are aware by which salmon fry are destroyed?—I believe no other than by angling; upon the Wye the destruction is principally by angling. The meshes of the nets in the several rivers are all of a sufficient size to suffer any fry to pass, and consequently there can be no risk of injury from the meshes of the nets.

Are there any obstructions on the rivers with which you are acquainted to the free ascent and descent of the fish to and from the higher and lower parts of the river?—There is none upon the Severn that I am aware of; the new weir that was upon the Wye I rather think is destroyed. There is upon the Usk Sir Samuel Fludyer's weir, just above Usk. Sir Samuel Fludyer has by prescription a weir upon the river, which of course impedes the ascent.

Is that a weir for the purpose of driving machinery, or for the purpose of catching salmon?—For the sole purpose of catching salmon.

Is there a local Act with reference to that river?—There is no local Act whatever. The late Act, which authorized the magistrates in sessions to fix the fence time, they have acted upon, and I think have acted very impoliticly; they first of all fixed the months of December, January and February as the fence months, they have recently withdrawn even December from the fence time, leaving therefore only January and February, just in the heart of the spawning season, not at all protecting the river during the time the fish is heavy in spawn.

Do you state that there are no weirs, or dam heads, or locks, or any obstructions with which you are acquainted, on the Severn or the Wye, injurious to the free ascent and descent of the fish?—I am not aware of any upon the Severn, whether there are any at the upper end of the river I do not know, but so far as my knowledge extends there is no weir whatever.

Is there no weir on the lower parts of the Wye?—There was a weir at what we call New Weir, between Ross and Monmouth.

To whom did that belong?—To Mr. Partridge; but that was connected with an iron forge, and I believe that that is now destroyed.

Was that weir used for the purpose of catching salmon?—No, I believe it was not

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not at all used for the purpose of catching salmon; but it was an impediment to their passing.

Have no weirs been recently erected in the neighbourhood of Gloucester?—No. Or raised or repaired?—No.

Do you conceive that, generally speaking, any regulation could be effected with regard to weirs in general for the benefit of the salmon fishery?—With compensation; for instance, when I allude to Sir Samuel Fludyer's weir, that certainly is a source of considerable profit; that fishery is let, I know, for a large sum of money; and it is a fishery by prescription, and which I suppose Sir Samuel Fludyer would not willingly permit to be destroyed without ample compensation.

Is there no regulation incumbent upon the owner of that weir at present?—I apprehend not.

You apprehend that he has a right to use it to the fullest extent, without reference to the interest of other parties?—I presume he has.

In what period of the year do you apprehend that right exists?—The year round.

Do you conceive that no restriction in point of close time attaches to the owner of a weir?—Of course if the river is in fence, it must attach to that as well as any other mode of taking fish.

Do you conceive that a person having a prescriptive right to a weir is subject to restriction as to close time?—I should conceive so.

Is it so understood?—I have never known it agitated, and therefore I am confident it must be so understood.

Are you aware that in point of fact the owner of that weir is restrained during the close months, and that he does not use it during the close months?—I cannot speak with certainty upon that subject.

Can you state any thing with reference to any adjacent rivers which you consider material in regard to what you have stated?—I think that by the local Act for the rivers in the county of Carmarthen they are open during the first of April till the first of November, and then are in fence from that time to the first of April; the consequenee of which is, that the Severn markets, Gloucester particularly, are supplied with salmon from Carmarthenshire, and that leads to a cover for the sale of Severn salmon during our fence time.

Is it your opinion, from what you have now stated, that a great difficulty must always arise to protect rivers, if there is a difference in the fence time?—I am most perfectly satisfied that there is great difficulty: it will be impossible to protect one river if you do not extend the law generally, so as completely to prohibit the sale of fish any where within the kingdom at some given period.

Is it your opinion that it would be expedient that the month of August should be included in the fence months?—I think it is not; I think it should be open.

As far as you can state an opinion, you would say that the fishery might continue till the 1st of September?—Certainly.

Is it your opinion, that if the fence time were rendered general and extended somewhat, that the breed of salmon would be materially increased?—I have no doubt of it.

And consequently that all parties must ultimately derive benefit?—The country at large must ultimately derive serious benefit. With respect to the fence time, my own view of it certainly has been the months of September, October, November and December.

Do you not consider that it is indispensable to allow healthy fish to proceed to the upper parts of the river, in order to induce the upper proprietors to protect the salmon fisheries for the benefit of the lower proprietors?—Certainly.

Consequently, you could not desire that in the neighbourhood of Gloucester you should be permitted to take the whole of the clean fish upon their ascent?—No.

Are there any other practices injurious to the salmon fisheries than what you have stated, for which you think a remedy ought to be applied?—I think there is one thing which is very much connected with the weirs, the mineral property has a good deal of influence on the upper part of the river; and I think in every Act by which establishments are enacted for lighting with gas any city or town, they are prohibited from permitting their gas to escape into the river, yet I suppose there is not a single instance where it does not.

Do you apprehend there is any difficulty in the parties possessing gas works in complying with what the law requires, if they were willing so to do?—I apprehend there is great difficulty; that as there must be a great quantity of gas washings to be disposed

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disposed of, I should be afraid any of the reservoirs they make are not equal to contain it. I was told only on Thursday at Gloucester, that there it was manifest that the gas washings were visible upon the surface of the river, but I did not see it myself.

Are you aware of its being usual for persons to fish at night, or to use lights in fishing?—No, I know nothing of that; there is nothing of the kind I believe in the lower parts of the river whatever there is in the upper parts of the river, perhaps there may be.

Charles John Brandling, Esq. a member of the Committee, delivered in a Plan of the river Tweed, from its mouth to Noreham, which is the extent of the tide-way; together with a letter from Mr. Innes, of Bromlands, explanatory of the same; and also a letter from Mr. Walter Jamieson; which were read as follows:— See No. IV.

"Bromlands, 12th March 1825.

"Sir,—In reply to your favour of the 9th instant. The method of using the *stell* nets now universally adopted in the river Tweed, from Hirnclef to the sea, and southward along the coast A, delineated in the plan sent you. This species of net is either stretched across the river or in the sea, and fixed by means of an anchor at one end, with the other resting on the bank; a man in a boat is stationed near the extreme outward end, holding in his hand the top line of the net, and the instant a fish touches the net he feels it, and calls to the people on shore, who immediately pull the anchor and net to the land, and the salmon are secured. And while they are performing this operation, another boat and net is launched to occupy the same ground as the former, so as to intercept the shoal of fish as they pass upwards. This process goes on incessantly, and the success attending it is such, that at the stations near the mouth of the river, sixty and one hundred salmon are caught by two boats in one day. These stell nets are as destructive as the *stake nets* or cruives, and the meshes are so small that I have seen trouts caught in them. On looking to my plan of the Tweed, you will understand the nets exhibited, amounting to one hundred and thirty-eight, are all *stell* nets. There are also used cairn nets along the banks, which being fixed constantly intercept a great deal of fish, particularly in floods; but I conceive the stell nets (a modern invention) to be the primary cause of the falling off of our fisheries. I have the honour to remain, Sir, your most obedient and humble servant,

"*Jas. Innes.*"

"C. J. Brandling, Esq. M. P.
"London."

"Kelso, 16th March 1825.

"Sir,—In exact conformity to your letter 10th current, which you honoured me with regarding the Tweed fisheries, permit me in the first place to acquaint you most exactly, that the fishery possessed by me belongs in property to his grace the Duke of Roxburghe. It commences at the head of Hempside Ford Stream, a little below Kelso, and continues upwards till it reaches the bottom of the Trow Craigs, immediately adjoining the property of Sir Henry Hay M'Dougal, of Macerstown, a distance of three English miles at least.

"In answer to your next inquiry, I beg leave with equal exactness to acquaint you, that from the commencement of fishings this year, viz. from the 10th January last until the 1st of February, I caught one hundred and twenty-one salmon and grilse. In this number there were,—

Unspawned fish	120
Only one clean salmon	1
	121

From 1st February to 1st March current, I caught forty-four salmon and grilse; in this number there were,—

Unspawned fish	25
15 Kelts (or spawned fish)	15
4 Clean salmon	4
	44

From 1st to 10th March current, I caught seventeen salmon and grilse; in this number were,—

Unspawned fish	7
(*Note.*—4 of these killed on the 10th current.)	
Kelts	9
One clean salmon	1
	17

"This short calculation will at once show, that during the whole month of January the fish on *this* quarter of the Tweed have not commenced spawning. It will also show, that in the month of February very few more than the *one half* of the fish in the river have deposited their spawn. Indeed, from long duration, I am fully persuaded that it would require the greater part of the month of March before the fish in this part of the river completely spawn.

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"With regard to the value of the fish thus caught, I have no hesitation in saying, that the whole of the unspawned are, with very few exceptions, altogether unfit for use. The average price which I have sold them this year is from three halfpence to two pence per pound, the kelts at the same price.

"From these facts, I am clearly and distinctly of opinion, that the fishings in the river Tweed ought not to be shut until the 1st of November instead of the 10th of October. Because, during this period, the fish in general are as good in quality as they are in the preceding month of September, and perfectly fit for any market; and again, because in the month of January and February the river Tweed is in fact *full* of unspawned salmon, not fit food, and therefore *not marketable*, ought for these very reasons to be kept shut up until the 1st of March in place of the 10th of January.

"This is not all; were the weekly close time extended from twelve o'clock noon on the Saturday till twelve o'clock noon of the Monday, every proprietor in the *upper* parts of the river would on that event have a fair chance of getting fish from his own estate, which would be a stimulus for them to *preserve them in close time*, when depositing their spawn, a circumstance of much more importance to the proprietors of the lower parts of the river than they are seemingly aware of.

"I intend to-morrow to go the length of Coldstream, in order to get information from the different fishers of the number and quantity they have respectfully caught since the 10th of January last, which I shall take care to get stated to me after the same manner I have my own, and afterwards proceed to Melrose for the same purpose.

"If I find the information worth communicating to you, shall forward the same without loss of time. Meantime, I remain Sir, with the greatest respect, your very humble servant,

"*Walter Jamieson.*"

Veneris, 25° die Martij, 1825.

CHARLES JOHN BRANDLING, ESQUIRE,

IN THE CHAIR.

Mr. *Griffiths*, called in; and Examined.

ARE you aware of any dam belonging to the Duke of Beaufort on the river Wye?—Most certainly not, nor do I believe that any belong to the Duke of Beaufort. There is a weir on the river Wye, a new weir connected with the works there, but which I believe not to belong to the Duke of Beaufort, and I rather think that is destroyed.

Mr. *William Viner Ellis*, called in; and Examined.

Mr. Ellis where do you reside?—At Minsterworth in Gloucestershire.

Are you acquainted with the fisheries on the river Severn and on the Wye?—Not with the fishery of the Wye.

Will your evidence be confined then to the river Severn?—Yes.

What is the present fence or close time on the river Severn?—It is during the months of August, September and October.

From the 1st of August to the 1st of November?—Yes.

Do you conceive that any alteration of the close time would be advantageous to the Severn fishery?—Yes; I think that the fence months are improperly placed, inasmuch as the months of September, October, November and December certainly are what I conceive to be the spawning months, in which the salmon go up to deposit the spawn.

You state that the salmon go up in the months of September, October, November and December to deposit their spawn, at what time do you conceive the spawn fish go out of the river, and return into it from the sea?—The spawn fish begin to come down about the latter end of March, and continue till April, and to a part of May.

According to that the river is full of foul fish during the months of January, February and March, and is so during September, October, November and December?—We in the river Severn, in those months, take but very few indeed. In January, February and March, we take what is called provincially the stake, that is, the old fish, which is very much exhausted from spawning during the months of March and April; we take very few indeed, because the fish swim down the river going to the sea, and the nets are drawn with the stream, therefore we do not inclose them.

What

What become of the very few foul fish you take in the months of January, February and March?—They are given to the fishermen, who claim them as a perquisite.

What proportion do you conceive of foul fish do you take in comparison of sound fish during the months of November and December?—I think a great deal depends upon the season; if it be a dry season the new fish do not come up till the latter end of November, or the beginning of December. When it is freshy, the river is much fuller of new fish; I should think in the proportion of ten to one, as the fresh water induces them to leave the sea.

What are the months that you conceive might be substituted for the present fence months, so as to be of the most advantage to the fishery above and below?—I should think the four months of September, October, November and December would effectually secure the old. It is true there are a great many new fish taken with them; but generally speaking, if the winter season has been freshy, the season is better before Christmas than it is afterwards; but at the same time, I conceive the old fish can never be protected, unless you prohibit altogether the fishing for the new.

Are you speaking now of the river both above and below the tide-way?—Yes I am speaking of the river generally.

The close time, if it was for September, October, November and December, would not answer the purpose of the fishery above?—We find, as I mentioned before, that it is according to the season; in very dry and warm weather the fish come up much earlier, and press up to the spawning part of the river and deposit their spawn, and return down again towards the latter end of the year, in November and December; and I have taken many hundreds which had on both the old and the new scales, after the fish had returned from the sea; and then it is called a new fish.

When does the spawn deposited take that shape as to come into life?—We are very far from the spawning part of the river, and I never have witnessed the spawn of the old fish; we have the samlets come down to us.

At what time does the young salmon fry make its way down to the sea?—In the month of April 1813, I marked six dozen and three salmon with copper wire as they were going down, and I continued marking them, from the 13th April, at various periods, a few at one time and a few at another.

What size were they?—I weighed them; they were from half an ounce to two and a half ounces.

Was the 13th April the first time they appeared?—No.

When do they first appear on their way down to the sea?—If there are no floods at the end of March, I should think they first appear at the latter end of March generally, and they continue in the river through April, and to the middle of May, unless the fresh water come at the beginning of May, which hurries them off to the sea.

Are there any obstructions in the way to the return of these samlets to the sea, in the river Severn?—There is an instrument which they call a put; I believe there is no other fixed engine kept in the Severn but the put, by which the Samlet is destroyed.

What obstruction is there in the river for the salmon?—They have what they call trumpets, and I believe they have hedges, stanks, and other devices to take them.

What are stanks?—They are banks, which are thrown up in the lower part of the river.

Are there any laws against such engines as you have mentioned?—Yes.

Are those laws observed?—No.

You stated that you marked six dozen of these samlets?—Yes.

When did you see any of these samlets again?—I confess I never saw any of them at my own draughts.

Do you consider the samlets you have just described that they return to the river; can you state when they return, and what size they are when they return?—They begin to return about the beginning of July, and they continue to do so till the end of August; and when they first return, which is either in the latter end of June or beginning of July, they are from 2½ pounds to 3 pounds, very rarely 4 pounds, but in August these fish grow to the size of 6 pounds: we have taken some 7 or 8 pounds.

Are those fish in roe; the smaller fish you have described, do they go up the river to spawn?—Some of the larger ones sometimes, but I think the generality of them return again to the sea, as they are scarcely to be found in the river even in the early part of September, and we conceive they come up again the next spring

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of the year, and are what we call gillings: they leave the river altogether in September.

Without spawning?—Yes.

You state that the fish come up the river for the purpose of spawning in the months of September, October, November and December?—Yes.

At what time of the year do these fish deposit their spawn?—I think the earlier ones, those which come up first, deposit their spawn in November, but the greater part in December.

What fence months do you think would best consult the interests of the different salmon fisheries in all the river Severn?—I should think the month of January ought to be added to the fence months in the spawning part of the river, even to the middle of February; but the month of January certainly.

Would not the disadvantages that would occur to the lower part of the river be amply repaid by the quantity of salmon that would be brought by the addition of those two months to the close, extending it to the whole of the river, the close time of these two months; would not the recompense be sufficient to induce them to add those two months by the quantity of fish which would be brought in consequence of it?—No, they would not; for we should thereby destroy the winter fishery altegether; for it is allowed, that in the month of January the new fish are in higher season in our river than in any other month, and that the largest fish also come up in that month.

Can you state whether in your opinion, by extending the close time to the middle of February in the upper part of the river, and commence fishing on the 1st of January in the lower part of the river, would not that prevent those persons who have fisheries in the upper part of the river from taking any of the clean or the young fish?—I apprehend if we began fishing in January in the lower part of the river, and prohibit it to the middle of February in the upper part, that there would be no chance left for the upper part of the river to take their share of the fish which come into the river; but in the upper part of the river there is a proportion of twenty to one of old fish to new, but in the lower part of the river there is a like proportion of new to old in the month of January, as very few old are taken. The months of December and January, in certain seasons, are the most productive months for new fish, yet at the same time I think that old salmon cannot be preserved when in spawn, unless the fence months are extended to the end of December, I think that would be with us a preservation sufficient. I do not think it would be so as to the upper part of the river.

Will you give us your reason for excluding the month of August entirely out of the fence months?—The young fish or the salmon fry return into the fresh water about the beginning of July, they are then much smaller than in the month of August. They are then what we call botchers, that is, salmon fry of the best season; they leave the river soon after, and return down to the sea; the botchers are from 4 to 7lbs. weight.

Suppose yourself to have no interest whatever, either in the upper, middle or lower fishery of the Severn, what part of the year would you recommend as fence, that is, with a view to the protection and increase of the breed of salmon in that river?—I fear my information has been overrated; I know nothing of the spawning part of the river, we approach the mouth of the river. The information I possess of salmon depositing their spawn has been obtained by reading their natural history. But with regard to the season when the old and new fish press up the river I can speak decisively, having been engaged in it for 34 years, and having I believe taken more than any one person on the Severn: the fishery I have extending about ten miles. In 1792 there were taken at those fisheries, from January the 29th to February 5th, 4,500 lbs. weight of salmon without a single old fish being among them. The proportion in January is fifty to one of new; it is the finest season in the year for fish; and it is the time when the largest fish press up the river; and if you make this a fence month you would sacrifice a great deal of most valuable food in our part of the river, when we have few if any old to protect.

If there was only one period of close time for the whole river in your opinion, then how long, to what period would you extend it?—September, October, November and December, and I think that would be sufficient.

If your object was merely to protect the breed of salmon, without reference to the interest of the owners of the fisheries, would you not be disposed to increase the fence time you have described?—Not for the whole river certainly.

Appendix, No. 2.

LETTER from Dr. Fleming to T. F. Kennedy, Esq.; dated Manse of Hisk, 16th March 1825.

No. 2.
Dr. Fleming's Letter; dated 16 March 1825.

Sir,—I EMBRACE the earliest opportunity of communicating to you the following statements on such points connected with the salmon fisheries as appear to be most important, in compliance with the wishes of the Select Committee, expressed in your letter of the 10th instant.

I.

Several species of the Genus Salmo, which are *inhabitants of the sea*, enter *rivers* at a particular season for the temporary purpose of spawning.

II.

I have evidence that five distinct species thus migrate periodically into the Tay, and are taken in the fishing nets. 1. *Salmo Salar*, or Salmon. 2. *Salmo Hucho*, or Bull Trout, probably confounded with the grilse. 3. *Salmo Eriox*, or Grey Shewin. 4. *Salmo Trutta*, or Sea Trout. 5. *Salmo Albus*, or Whitling.—The first of these is the most important in an economical point of view.

III.

Salmon during the winter inhabit the deep sea, and are at that season in their leanest state. During the spring and summer they frequent the shores and estuaries, are then fattest, and devoured by the numerous seals and grampuses which unceasingly pursue them. In autumn, salmon enter rivers, ascend to the spawning fords, spawn, and retire again to the ocean; the males preceding the females in the descent. When ripe for spawning the flesh is hard. In their approach to the spawning ground, and in their subsequent descent to the sea, they are taken by poachers and legal fishers, who likewise disturb the beds of spawn.

IV.

When salmon enter *estuaries* in the condition of red-fish (*i. e.* ripe for spawning), on their way into rivers, or when they retire from rivers as kelts (*i. e.* spawned fish), they invariably keep in deep water. Hence no individuals in these states are taken in stake-nets erected on those banks in estuaries which are left dry by the ebbing of the tide.

V.

The fry descend to the marine abode of the species in the spring months, keeping the margin of the stream until the river joins the estuary or sea, where they sink into deep water, out of the reach of coble-net or stake-net. During their descent in the river, they are taken by the coble-net and angler, interrupted by mill-dams, and destroyed in mill-races.

VI.

If the natural history of the fish be attended to, the close season should not cease earlier than the 1st of May, nor commence later than the first of August. Should it cease earlier, *fry* and unmarketable *kelts* will be taken. Should it commence later, unmarketable *red-fish* will be taken. I am inclined thus to limit the *open term*, in order to provide against the variations of the seasons in reference to floods, and to secure an abundant and permanent supply.

VII.

Did not several circumstances render it inexpedient to make so great a change in the present laws, regulating the salmon fisheries, circumstances, however, in opposition to the habits of the fish, I would recommend that all fishing in *rivers* be prevented, in order that the breeding ground of salmon may be protected, along with the red-fish, the kelts, and the fry.

VIII.

Coble-nets in *rivers* are most efficient engines; but all fixed apparatus, in such stations, should be prohibited, as ruinous to the fry and unmarketable fish, or favourable to the poacher, especially if permitted to remain during the close season.

No. 2.
Dr. Fleming's Letter; dated 16 March 1825.

IX.

The coble-net in *estuaries* and on the *sea shore* is a useless engine, owing to several obvious circumstances connected with the habits of the fish, the condition of the bottom, and the motions of the water.

X.

Stake-nets should be permitted on the sea coast, and in estuaries as far inland as that point where the rivers terminate, suffering, however, such engines to extend no further from the shore than to the low-water mark of neap tides. In such stations stake-nets could neither capture fry, kelts nor red-fish.

XI.

Unless shore and estuary fishing with suitable engines be permitted, a very great proportion of the salmon accessible during the summer months would go to feed seals and grampuses, instead of the British people.

The preceding Remarks embrace my opinions on the most important points connected with the salmon fishery. In the evidence taken before the Select Committee during the last session of Parliament, and appearing in the Report, there are several statements of a somewhat imposing kind, which, as they appear to me to be erroneous and apt to mislead, I shall here take the liberty of opposing them.

1.—It is asserted (p. 145,) that salmon "belong, in fact, to the river in which they were spawned;" now, in fact, they belong to the sea, where they grow and are nourished.

2.—It is asserted (ib.) that salmon always return to the same river. This is not probable, when we consider the circumstances in which they are placed during their residence in the sea.

3.—It isasserted (ib.) that the *old law* was framed upon these principles, and never was contemplated as permitting shore fishings. The expression of the old law indicates a different interpretation: the regulations prohibiting *fixtures* applying generally to *rivers*, where under the influence of the tide, or where fry and kelts and red-fish may be destroyed; and not to estuaries and the sea shore where they cannot be injured.

4.—It is asserted, that salmon enter and leave rivers for other purposes than those connected with spawning. (The evidence of Messrs. Little, Halliday and Johnstone.) 1. That they enter rivers to rid themselves of sea lice (the Monoculus Piscinus of Linneus.) 2. That they forsake the rivers to save themselves from being exhausted by residence in fresh water, and from having their gills devoured by a maggot (the Lernæa Salmonea of Linneus.) The whole natural history of the salmon contradicts this hypothesis.

5.—It is recommended, to prevent the erection of stake-nets for half a mile, seaward, on each side of the mouth of every river (p. 123.) There does not appear to be one fact in the natural history of rivers, or in the habits of the fry, the red-fish and the kelts, to justify the adoption of such arbitrary limits; many considerations would induce us to avoid them.

6.—In the Report, an opinion is expressed by all the witnesses that salmon are not so plentiful as formerly. It is true that in many rivers, where salmon once bred in considerable numbers, little if any spawning now takes place, owing to interruptions from mill-dams, and impurities thrown into the water; but it is equally true, that poaching is now practised in a more efficient manner than formerly. Hence the quantity taken may be as great as formerly, though the *legal fisher* may not get so large a share.

These Remarks include a brief expression of the opinion which I have been led to form on the interesting questions connected with the salmon fisheries. My information, I may observe, has been derived from a comparison of the declarations of practical fishers, often discordant, and from observations in reference to natural history, made during the last thirteen years on the estuary of the Tay.

In the hope that these observations will be regarded as a ready compliance with the request contained in your letter, and a mark of my willingness to communicate to the Select Committee any information I may be supposed to possess,

I have the honour to remain, Sir,

Your very obedient servant,

J. F. Kennedy, Esq. *John Fleming.*

Appendix, No. 3.

PAPER delivered to the Committee of the House of Commons on the Salmon Fisheries, by Sir G. S. Mackenzie, Bart.

No. 3. Paper on the Salmon Fisheries, by Sir G. S. Mackenzie, Bart.

Habits of the Salmon.

THE salmon is known to enter rivers and to spawn in them at different periods of the year. Differences in these respects are known in the same river, as well as in different ones. It is known also, that this fish goes up at various stages of its growth. I think that causes may be assigned for most of these differences.

With respect to the cause which directs the salmon from the sea to the fresh waters, it has been said that their being tormented by an insect is the cause of their movements. I have never observed these insects, on salmon coming out of the sea, to be so numerous upon them as to make me suppose they were the cause of any great annoyance. Nevertheless, the salmon may enter fresh water partly for the purpose of getting rid of them. It is certain, however, that the chief cause of their seeking to enter rivers is the instinct of propagation. The impulse that directs the fish to push their way up the rivers is so strong, that they meet with no obstacle which they do not attempt to overcome; and in their attempts they are sometimes much injured. I have often seen them leap a fall, near my residence, of about thirty feet high; but they seldom spring out of the water more than eight or ten feet. I have seen them leap over a dry rock of considerable height, and drop into the water behind it. After they have entered a river, the object of the salmon appears to be to push as far up towards the sources as possible.

From such facts as have come to my knowledge, it appears that the salmon is found earliest in those rivers that have the longest courses. I am not certain whether difference of latitude causes any differences in the times for fish to begin to enter rivers; and possibly this may be difficult to determine; for it is well known that while snow is melting on the mountains few fish go up. Whether it be its coldness, or any other cause that makes them dislike snow water, I cannot tell; but the fact has been noted, and it is consistent with my own observation.

The object of the fish in pushing towards the sources of rivers seems to be, that they may deposit their spawn in the small streams which form the sources, and which, on account of their being near the springs which supply them, are neither so apt to run dry as the river lower down, where the effect of evaporation is greater, nor to be so affected by frost as to stop the water from running. The water is always steadier in its temperature near the sources, and varies little throughout the whole year. The water of these streams is likewise fitted peculiarly for vivifying the spawn, as they form, on account of the general nature of the high ground where they flow, a constant succession of rills, by which the water is kept fully saturated with air. Salmon bred in a particular river return to it; and it may be supposed, that as some of them may go farther out to sea than others, and find more difficulty in discovering their own rivers, they may be later of reaching them. Sometimes salmon mistake one river for another, but rarely. I have been correctly informed of an instance of a salmon of the river Shin in Sutherlandshire, which flows into the Dornoch Firth, having been taken in the Conan which flows into the Cromarty Firth. This may frequently happen without being noticed by any who take an interest in such things. Some fish may meet enemies in their course, and turn back to avoid them. As the fish are known to spawn at different times, they will of course descend to the sea at different times; and as it appears necessary for them to remain in the sea during a certain time, they will re-ascend at various periods of the season. Fish that are detained will enter the rivers fuller of spawn; that is, with the ova in a more forward state than others; and this may account for some depositing their spawn nearer the mouths of rivers. I do not believe that the salmon ever spawns in the sea; such a thing is contrary to its known habits, and has never been observed. Should necessity force a salmon to spawn in the salt water, I feel convinced that the ova would perish. Every salmon in the sea goes into some river for the purposes of propagation.

With respect to the natural causes which may occasionally operate in diminishing or increasing the number of salmon, it may be of importance to consider them, in order that effects which ought to be ascribed to them may not be unduly laid to the account of artificial causes; and also, that the Committee may be guided in proposing measures for the protection of the fisheries.

Natural causes operating on the number of Salmon.

The state of the weather at the time of spawning, and after the spawn has been deposited, is probably of much importance to the supply of fish. If the rivers are in rather a low state from October to January, the spawn is deposited in comparative safety; but if there be high floods during this period, the fish cannot easily deposit their spawn in a safe place. If they go to shallow parts, and succeed in burying it, when the waters subside it is left dry. If floods, such as happened during the months of October, November and December of the last year, occur immediately after the spawn is deposited, it may be swept away. Gravel newly stirred, as it is by the salmon when covering the spawn, is easily removed; and it may happen also, that a quantity of gravel and sand may be accumulated over the spawn, such as to prevent its being vivified, or the fry escaping. It will be of importance to

No. 3.
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observe the state of the fisheries during the season of 1826, and likewise the number of grilse that go up this year, that the probable effects of floods may be known. It is true that the state of the rivers did not admit of much poaching; and it is possible that the fish may have pushed high up the tributary streams during the floods. A rather low state of the rivers until the fry swim appears to me to be most favourable to the security of the brood, both because the fish can work with freedom in preparing the spawn beds, and because there is nothing to disturb the beds when finished.

As the streams forming the sources of rivers are the least liable to be affected by vicissitudes of weather, and as salmon naturally push for these, it is of the utmost consequence to allow the early fish to escape, in order that they may reach them, and there deposit their spawn in safety.

The salmon has many enemies, which prey upon it at all the stages of its growth; and it is obvious that when these enemies happen most to abound, the salmon will be more scarce than when the numbers of its enemies are reduced. While in the state of spawn, and when emerging from the ova, eels, pike, trout and birds, devour the young. The water-ousel, though a small bird, appears indefatigable in its search for the spawn of salmon and other fish. Every kind of water fowl is destructive of spawn, and of the young fry. The otter destroys considerable numbers of grown fish, and this enemy may be more numerous than is commonly supposed, as he does not expose himself much to observation.

But these enemies are of little consequence when compared to those which the fry have to encounter in the sea, and the salmon on its way to the rivers. It is impossible to protect the fry from natural enemies in the sea, but I think much may be done to save the salmon from the attacks of the porpoise and seal. The former of these is often confounded with the grampus, which is much larger and is not so numerous, though more indiscriminately voracious. The porpoise is seldom more than seven feet long, while the common grampus reaches to twenty-five feet. While the porpoise will repay the trouble of capture, the grampus is of little value. A porpoise, it is said, will yield a hogshead of oil, and its flesh was in former times eaten at the tables of the rich. The skin is said to be valuable for making leather. The value of the seal is well known; it is very destructive of salmon, and follows them even into the fresh water. Hitherto no adequate means have been adopted for taking either the seal or the porpoise, and it will be necessary that a bounty should be given to encourage their being destroyed. It has occurred to me that both, and also grampuses when they come up the estuaries in pursuit of salmon, might be easily taken by a method similar to that by which a large species of shark is captured in Iceland. Bait is put upon stout hooks fixed to small chains four or five feet long, to which a line is attached, with a buoy, and the whole is fastened to a small anchor; were similar hooks baited with salmon to be anchored across estuaries, or even fastened to stakes or stones at low-water mark, it is certain that great numbers might be taken. I beg leave to refer to the Sketch, No. I., and to describe the plan I would recommend for the capture of these destructive animals. The figures are not drawn to a scale, and serve merely to show what is proposed.

See No. I. Fig. 1.

Fig. 1.

B. Fig. 1, shows three buoys as floating on the surface of the water and supporting a rope R. the ends of which are attached to two anchors. From this rope are suspended the baited hooks by small chains. Of course the number and size of the buoys must be regulated by the weight they will have to carry. In putting on the bait, the fish should be opened, and two hooks arranged in it as in Fig. 2, so that when sewed up again, it may float in the natural position, and a hook be ready whether the fish be seized by the head or tail. Fig. 3 is the full size of a hook, which, if not too high tempered, will be sufficient probably, judging from the hooks which I saw in Iceland for taking the sharks; but a little experience will soon inform as to the proper strength of hooks and lines. The distance between each bait may be twenty or thirty feet, and the buoys such as not only to keep them floating, but to offer considerable resistance to the animals when caught. Salmon may be thought an expensive bait, but for every seal or porpoise killed perhaps some hundreds of salmon may be saved.

See No. I. Fig. 2.
Fig. 3.

Besides unfavourable seasons and natural enemies, there may be many unknown causes operating on the success of the fisheries. We find all wild creatures at times very numerous, and at times very scarce, when we can assign no cause for either. It may be known to the Committee that about thirty-five years ago, the haddock almost entirely disappeared from our coasts, and that for many years it was a rare fish. After it became comparatively plentiful, it was long before it was caught of its former size. It was reported at the time I refer to, and is I believe on record, that ships had sailed in the North Sea through many leagues of water covered with dead haddocks.

Artificial causes operating on the number of Salmon.

I now proceed to consider the artificial causes that operate on the success of the salmon fishery. Of these, by far the most destructive is the practice of killing spawning fish; a practice well known to exist in all rivers to an extent almost incredible. The law is ill adapted for checking the evil, and the upper heritors, on whose property the fish are destroyed, have become careless of their preservation, on account of their having no proper remedy against the illegal modes of fishing on the lower parts of the river, and which has almost entirely ruined their fishings. They cannot afford to litigate against innovations, since they are required to prove the exact damage they sustain; and litigation, for the purpose of settling whether a person having a right to net and coble may use that right to any extent and in any manner, presents a view of uncertainty and expense, which the already decreased value of their property renders appalling. The penalties against killing fish in close time are too trifling either to be cared for by trespassers, or to repay the expense of recovering them. The expense of justice at the period when the old Scotch

statutes

statutes were passed, was very different from what it is now. By an Act of the 15th Parliament of James VI. the first offence was punishable by fine of 10*l.* Scots, or 16*s.* 8*d.* sterling, and the fine for the second offence double, or 1*l.* 13*s.* 4*d.* sterling. The third offence was punished by death. The next Parliament in the same reign ordained the offence to be punishable as theft; but I do not know that this Act has been ever enforced, or whether it could be enforced; and the punishment of theft is too severe for such a crime. The upper heritors having now little interest in protecting that which is to become the property of others, the safety of the spawning fish is the most important subject that the Committee has to consider. The law should provide means partly by levying a moderate per centage on the rents of the fisheries, partly by a small duty on salmon brought to markets, and partly by public aid, for properly watching the rivers during close time, and when the fry are descending to the sea, and for the defraying the expense of prosecutions.

In my opinion these matters, and all that relates to the regulation salmon fishery, should be placed in the hands of a board of commissioners, with full power to enforce all enactments which may be made in reference to modes of fishing, to prosecute delinquents, and to appoint inspectors and watchmen on all the salmon rivers the value of which exceeds a certain rent. The board should be empowered to call for evidence and information respecting rights and practices, and to make local regulations, according to circumstances, that may be submitted to it. The appointment of such a board would, I conceive, greatly facilitate the framing of a general law, and serve most important and useful purposes. Every one knows how the herring fishery has prospered under the management of a board; and there can be no doubt of the existence of the salmon fishery being dependant on its being placed under public superintendence. Separate boards will be required for the three kingdoms.

The fishing of salmon llowed in general to begin too soon, and to continue too long. The fish begin to go up into some rivers at an earlier period of the season than into others. I have already remarked, that the longer the course of a river is, the earlier do the salmon begin to ascend it. On the west coast of Scotland the rivers are much shorter in their courses than those which empty themselves into the German Ocean, and the salmon are later of appearing in them, and on our western coast they appear first in the larger rivers. In some they do not appear till June, and in others not till July, in any great numbers. It is necessary for the fish that have to ascend far before they reach the sources of the rivers, and have to overcome many obstacles, to begin their ascent early. Such fish as come later are fuller of roe, and cannot go so far, they therefore deposit their spawn lower down than where the early fish leave it. Other fish go up very late, and with the ova far advanced, and they bury it in the shallows nearer the mouth of the river. Thus we may account for spawn being deposited in different parts of a river, and at different times. The spawn which is deposited first, and which is probably that of the earliest fish, first comes to life; and as it is placed in the upper channels, the fry have to travel farther to the sea, and consequently acquire a somewhat larger size than the fry which are produced later; and thus we see why the shoals may consist of individuals varying in size. In the same manner we may account for the varying size of the salmon that ascend the rivers, as well as for their arriving at different periods of the season; since it is evident that if the fish feel an impulse to go to the fresh water at a certain age, or as I think is most probable, at a certain period after they have been in the salt water, they will come at different times and of different sizes.

The time for opening the rivers should be regulated by the time of the descent of the fry and foul fish. In the rivers with which I am acquainted, the descent is seldom accomplished till towards the end of April; and as far as I know, this is the case with most rivers in Scotland.

If the close time were to continue till the 10th or 15th of April, all the fry and foul fish, at least the greatest bulk of them, will have descended, and a sufficient number of early fish will have passed up. The open time should not exceed four months duration; and fishing in the sea should not begin till the rivers are open.

There are many modes of fishing injurious both to the breeding of the salmon and to the interests of the upper heritors. Of these the yair or weir is the most destructive of the fry, almost incredible quantities being intercepted by the wicker work, and killed on being left by the tide. Yairs are illegal by an Act of the Scottish Parliament in all rivers and estuaries except the Solway; and their illegality has been confirmed by a late decision of the House of Lords. I have never visited a yair at the time when the fry descend, but I have often heard from unquestionable authority that a yair will destroy in one tide a quantity of fry sufficient to replenish a whole river abundantly. Yairs ought all to be thrown down. Whether the proprietors have a right to any other mode of fishing by way of recompense for the loss of yairs, must be determined by the answer to the question—is any remuneration due to a person for losing a right exercised contrary to law? The yairs at the mouth of the Conan, belonging to Mr. Forbes of Culloden, are known to be remarkably destructive of fry; and of late years, no person but the fishers has been allowed to enter it after the time when the fry begin to descend, with the view to conceal the destruction I believe. There were formerly many yairs in the Firth of Cromarty, but from the expense of keeping them up they have been relinquished. The yairs of Mr. Forbes at Ferrintosh are so near the river, that they are sufficiently profitable. It is only about thirty years ago that the salmon fishery became an object of speculation in the Conan river, and soon after the new modes of fishing began to diminish the number of salmon.

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The next most injurious implement is the *Coble-net* as now used. Owing to its use long before the fry and foul fish have returned to the sea, and before the spawn has come into life, vast numbers of fish are taken that are useless, because unwholesome and unmarketable. It is a question whether persons, whose nets catch foul fish after the usual time for opening the river, are liable to punishment for what they cannot avoid. To this early use of the coble-net, and to the practice of constant work night and day with several nets overlapping each other, and one left to hang in the water, I chiefly attribute the deterioration of the fishings I am particularly acquainted with, and of those in every river where such practice obtains. Under the existing laws, I conceive that the right of coble fishing should be exercised according to former use and wont; but the restriction is not attempted to be enforced, for the reasons already given. No nets should be suffered to be drawn during the night, that is, between sunset and sunrise; and after a net has been hauled, neither the same nor any other net should be allowed to be used within two hundred yards of the place, or at the same place where the net was hauled, until after an interval of at least twenty minutes. One cause why heritors do not combine to stop illegal practices is, that their fishings are so much decreased in value, that no precise valuation can be made, and consequently their respective shares of the expense of litigation cannot be fairly apportioned.

The injury done by the coble-net to the spawn and fry may be prevented by prohibiting the use of a bottom rope and weights till the fry have all left the spawning beds, and the foul fish have gone down; and the meshes of the net should not be less than four inches square in any part of it. The reason of the nets used in many rivers being so narrow in the meshes as they are, is, that the fisherman are partly paid by allowing them to have all the trout taken as a perquisite, and with the trout numbers of small salmon are killed, which ought to be preserved. I am of opinion that the length of the nets should be limited, in cases where the fishing of both sides of the river belong to one proprietor, to three-fourths of the breadth of the river where it is fished; and where each side belongs to a different proprietor, to two-thirds of the breadth.

In many cases it is uncertain, from the expression of the title, whether a proprietor has a right to half of the whole fishings along his property, or only to fish half the breadth of the river from his own side. In most cases, I believe, use and wont regulate this matter; but it has not done so in all; and it is of importance that it should be settled in every case.

The Cruive, under its present regulation, is a most destructive engine; but under proper regulation it would be by far the best mode of taking salmon in every river where it could be constructed. In the river Conan the proprietors of the cruives have, by prescription I believe, established a right of fishing below them with net and coble; and this has given rise to very gross abuses of the cruives. In order that the Committee may understand what follows, I refer to a sketch of a cruive-box, Fig. 4: H H. is the grate or heck opposed to the stream. It is composed of vertical bars, with intervals which permit the water to flow through the box. S S. are the scales, each of which is a grating formed of horizontal bars. They are affixed to vertical axles A A. which are moveable, and admit of the scales being pushed open inwards, but they are prevented from shutting closer than five or six inches. The salmon forcing its way upwards pushes through the opening, but cannot return, nor get forward. I believe that by the decisions of the Court of Session, it is now understood that the bars of the heck shall be two inches and a half asunder, five inches deep, two and a half inches thick at the edge next the stream, and one and a half at the edge within the box, so that they have the shape and position of Fig. 1, No. II., the edges being rounded off according to the law. The interval prescribed would admit of a fish under 6lbs. weight to get through; but the depth of the bars, notwithstanding their shape, opposes much difficulty to the exertions of the fish. A part of the heck of the breadth of an ell is made movcable, for the purpose of being removed at six o'clock on Saturday evening, so that the fish may have free passage till the same hour on Monday morning. This is what is called the Saturday's Slap. The mode of taking out the fish is to unroll a screen of sail-cloth in front of the heck, by which the water is stopt from flowing into the box, when a man descends into it by a trap-door, and kills the fish.

See No. I. Fig. 4.

See No. II. Fig. 1.

Having now explained the construction of a cruive-box, I will point out to the Committee how easily the regulations are evaded, and the salmon prevented from passing. From the dyke being built across the whole stream, it is obvious that the strongest current will flow towards the box, and that every thing that floats in the water will pass towards the heck, there stop and obstruct it. There is no law, with which I am acquainted, obliging the occupiers to remove these obstructions, though it may appear they are obliged to remove them by implication. It too often happens that the occupiers throw things into the water for the purpose of stopping up the grate, so that no fish can pass even when the slap is open. When a proprietor of a cruive has also a right of coble fishing below it, as is the case in the river Conan, the fishermen prefer the latter mode of taking the fish, and do all they can to keep them out of the cruive; accordingly, they place a bit of wood between the scales, or a stone, and so much under water that it cannot be seen unless by going into the box, and it is a question whether they are obliged to open the box for inspection. They ought by law to be bound to open the box, and shed off the water whenever required to do so by any one having interest in the fishings. As the cruive-boxes are set for fishing as soon as the rivers open, and this so early as December and January, the fish that have spawned cannot pass them to the sea, unless a flood happens to carry them over the dykes. On this account, if the time of opening the rivers be earlier than I have proposed, the scales ought to be folded back during the slap time; though this be not favourable to the fish ascend-

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ing while the whole heck is not taken out. It would be best to have as much of the heck removed during slap time as is equal to the breadth between the axles of the scales, and to have them folded back always during slap time.

It is surely contrary to the interests of the upper heritors, and hurtful to the breed of salmon, that a proprietor should have both a cruive and coble fishing. For the interest of the public he should be obliged to relinquish one or the other, or at any rate to keep the cruives open while using the coble net. The reason why the fishermen prefer coble fishing to the cruive is, that the fish are often much injured by their struggling in the box, and the force of the water. No attempts have been made to improve the cruive-box, so as to prevent the salmon being injured. I will now describe what ought to be the form of a cruive, so that it may become a useful and fair mode of taking salmon. The fault of the boxes at present in use is their being too small, and having no chamber in which the fish may swim in still water, so as not to be injured before they are removed. To remedy these defects, the boxes should be constructed as in Fig. 1. No. III. H H. is the heck, which, for convenience of removal, may be made in three pieces as represented, and any one of which may be taken out as the slap. The bars of the heck should be of the form represented in No. II. Fig. 2. Each bar should be 2 inches square, set in the lozenge form, at least 2 ½ inches asunder, and having all the angles a very little rounded, except that opposed to the stream. This form should be enforced by law. The breadth of the opening where the scales S S. are placed may be 6 feet. C. is a chamber formed by the two partitions P P. The diagonal one serves a double purpose; it both forms the end of the chamber, and leads the water coming through the heck towards the scales. It is always of importance to have a sufficient supply of water passing through the scales. There is an opening about 2 ½ feet wide left at O, by which the fish may enter the chamber, which they will do whenever they find they cannot pass the heck. These partitions should be lined with deals to the height of 1 foot, as well as the part F, and the rest above may be formed of bars, so that when the river is in flood, the water may have as free a passage as possible. The safety of the box during the winter requires that these partitions be removed as well as the scales, and the whole of the heck, as soon as the fishing is over. The top of the box should also be removed. The depth of the box from front to back should be 15 feet, and the width the same, or perhaps 12 feet width may do, the chamber being 6 feet wide. It should be enacted that the part of the heck forming the slap should have proper machinery attached to it for lifting it up, that the force of the water may not be made an excuse for not opening it. The scales must be prevented from shutting closer than six inches, and should be removed or folded back when the slap is open till the 1st May. The bottom of the box should be so placed that the water issuing from it shall not fall perpendicularly, but proceed in a stream; and it should not be much above the bottom of the water in the pool above the dyke. As it is for the interest of the proprietor to have the fish in as good condition as possible, the legislative interference should relate to the form of the hecks, width of the slap, opening of the scales, the removal of obstructions, and the position of the bottom. Proprietors may be left to construct the interior as they may fancy, best suited for the safety of the fish.

See No. III. Fig. 1.

See No. II. Fig. 2.

See No. III. Fig. 1.

As there is no penalty fixed by law for punishing improper practices with cruive-boxes, upper heritors are obliged to prove actual damage, which it is impossible to do, so that whatever penalty be awarded it is merely conjectural as to the amount of injury sustained. Particular penalties ought to be fixed by the law, and be doubled for the second offence, tripled for the third, and so on; the expenses of prosecution being added. These penalties might form part of the fund for watching the rivers.

I do not think the Saturday's Slap by any means sufficient to give the upper heritors a fair proportion of fish. The slap should be also opened at six o'clock on Wednesday evening, and shut at the same hour on Thursday morning. This should specially refer to all cruives now existing where there are upper heritors, and with respect to all cruives to be erected in future by any proprietor who possesses both sides of a river; and where there are upper heritors, I would recommend the revival of the principle of an old statute, which ordained that the mid-stream should be left free. The form of cruive, which I consider best adapted for cases of this kind is seen in No. III. Fig. 2. The middle of the stream should be left open to the extent of one-tenth part of the breadth of the river, and in no case less than ten feet. The dykes next this opening should be parallel to the direction of the stream, and the water issuing from the boxes should be directed by a jetty towards the mid-stream, to prevent the course of the river being altered. In cases where only one-half of the river belongs to a proprietor, the cruives should be formed as in Fig. 3. It is necessary that no erection should be allowed that can injure the property of the proprietor of the opposite side, by throwing the force of the stream upon his land; therefore the dyke should have the form represented, and the extreme point of it should not reach beyond the middle of the river. Such cruives should likewise not be nearer to each other than 300 yards, on whichever side they may be erected. In cases where there are no upper heritors, or where they choose to unite their interests, dykes may be allowed to be erected across the river; and as there is no necessity for a Saturday's Slap in this case, it need not be enforced, as abundance of fish will pass to spawn during close time. But the hecks should be regulated so as to allow all growing fish to pass.

See No. III. Fig. 2.

See No. III. Fig. 3.

As it is obviously of much importance to allow all growing fish to escape, as well as a proper proportion of male fish, there is no way of securing this object so effectually as by legalizing the erection of cruives in the form which I have suggested, and fixed machinery of any kind, provided there are openings in it sufficient to allow all fish under six pounds

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weight to pass. There is indeed nothing to prevent the proprietors of salmon fisheries from erecting cruives or machinery, which shall not entirely obstruct the rivers; and where only one side of a river is possessed, cruives cannot be deemed illegal which stretch only half way over, and do not throw the water on the opposite land so as to damage it. Yet, I think this method of catching salmon of so much importance to the permanency of the breed, as well as to the abundant replenishing of the rivers, that I strongly recommend it to the consideration of the Committee, with the view to its being expressly sanctioned and encouraged by law, under proper regulations. There are many rivers that cannot be fished by any other means than cruives.

I have said that it is of great importance to allow growing fish to escape. I consider grilse as growing salmon, and not a distinct species or variety, notwithstanding what has been stated in support of an opposite opinion. Though I have had numbers of them before me, I never observed such differences as could warrant a positive statement that the grilse was other than a young salmon. Every naturalist knows that the young of a great many animals differ in appearance from the parents, so much so as to have been long considered as distinct species. The fact that grilse spawn is not by any means sufficient to distinguish them as a species; for almost all animals procreate before they have attained their full growth. Salmon of ten pounds and of fifteen pounds both carry spawn; and hence, if the argument were good for any thing, we should be obliged to divide the salmon into species for every pound of their weight. While, however, I believe grilse to be young salmon, I cannot from my own knowledge positively state it as a fact ascertained beyond all doubt; but I have frequently heard it stated that grilse had been marked, and that they had returned full grown salmon. I was informed not long ago by a friend, that he had marked a great many grilse which had so returned. It has been stated that grilse only are found in some rivers. This proves only that the varieties of salmon belonging to some rivers are smaller than those in others; a fact long ago ascertained beyond all doubt. It is possible that what are called grilse in some rivers may be a variety of salmon on its way to some particular branch; but I feel persuaded, though not positive, that no single branch stream has more than one variety of salmon. This subject requires farther investigation. I believe that the fry begin to ascend the rivers as grilse about three months after they have been in the sea. Be all this, however, as it may, it is evidently necessary, if it be important that young salmon should be suffered to grow, that all fish of the same size, and resembling them, should escape likewise. For this purpose a preference should be given to fixed machinery over nets. There is a method of capturing salmon, which though expressly mentioned in some titles, ought to be abolished. It is that of affixing basket work across low falls, or salmon leaps as they are called. When the fish miss the leap, as from the position of the basket they must almost always do, they drop into the basket and are taken. This method is not practised in very many places, I believe, but it is destructive to the breeding fish. In some places the fish are taken in the act of leaping by hooks fastened to the ends of poles, and by spears. All these modes of fishing should be prohibited. No angling should be allowed in close time, on any pretence whatever.

The last method of taking salmon which I have to mention is the Stake-net; and I understand it to be a chief object with the Committee to ascertain whether this engine, when placed in the sea, be injurious to the river fishings. I trust that the statement I am now to make will prove me conscious of no other feeling than that of perfect impartiality, and that I have more regard to truth than to interest. It has been hinted to me that stake-nets might probably turn to some account, if erected on some parts of my property on the west coast of Rosshire. I am in utter ignorance of the capabilities of my small portion of the coast; but allowing myself to anticipate some benefit should stake-nets be made legal, I am much more deeply interested in the river fishings on the eastern coast. Being thus in a manner placed in a situation to plead for two opposite interests, I am aware that my testimony may appear to be given purposely to serve both; but my opinions were formed before I was aware that I could have any interest in the stake-net fishing. I will state what I know to be truth, and my opinions are formed on well-ascertained facts; and though what I am to state contains much that is against stake-nets, I begin by mentioning that I am far from being hostile to the extension of the sea fishery, provided it be placed under strict regulation.

With respect to stake-nets, as now used, being injurious to the salmon fry, they are so unquestionably near the mouths of rivers and in narrow estuaries; but if properly stretched in the manner I will describe, they could not do the smallest injury to the fry. The passage of the fry happens at different times in different seasons, and does not take place all at once in any year: sometimes fry are seen so early as January in the Tay, as I have been informed by good authority, and continue till the end of May; but generally the great bulk of the fry passes in April, as is the case in the rivers of the north of Scotland. I have heard the fact so often stated by persons of credit, that I have no doubt that stake-nets detain the fry. But, as already remarked, the fry could not be stopt if the nets were properly stretched; and even if this did not prevent the destruction of fry, it is an easy remedy to prohibit stake-nets being erected till May within estuaries. But the principal fact to be ascertained is, whether salmon bred in a river uniformly and certainly return to it. That they do is, I think, beyond dispute; not only so, but that each river has its own variety or tribe of fish. I know more than even that; for it is a fact that *three varieties* of salmon, quite distinct from each other, enter the river Conan, and that two of these belong to its two branches. I once happened to be angling below the junction of the lowest branch, with a party of strangers on a visit to the late Lord Seaforth at Brahan Castle, when by a singular

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singular chance I killed three salmon, one of each variety, and I showed them to the gentlemen with me. The variety that belongs to the main river is a handsome fish, being considerably broader in proportion to its length than the others. That belonging to the lower branch, the river Orrin, is a long lank looking fish, and is little esteemed when compared to the others. The salmon of the upper branch, the river Rasay, or the Black Water, are more round and full, and are reckoned the best of the three varieties. It consists with my own knowledge, that at least two varieties go up the Dornoch Firth, one of which is the remarkably large and coarse variety, bred in the river Shin. I have no doubt that if the members of the Committee will take the trouble to compare the salmon exposed for sale in the fish shops of the metropolis, they will see enough to satisfy them that there are varieties of salmon. Seeing that a peculiar and well-marked variety uniformly ascends the river Rasay, the fishing of which belongs to me exclusively, and that the fish of the other streams connected with it are easily distinguished, I may here remark, that if stake-nets or sea fishing were to be prohibited on the ground that it would deprive the rivers of fish, I might then with justice demand, that the river Conan should not be fished below the junction of my branch of it, on the ground that a vast number of my fish, bred in my own river, would be captured. The Committee will give what weight they please to this remark. From what I have stated I have no manner of doubt whatever, that every salmon found in the sea, whether in estuaries or in the ocean, belongs to some river or other. Hence all salmon caught in the sea, though it may be perhaps impossible to tell to what river they belong, unless when the variety is well marked, certainly would have entered some river had they not been intercepted. The conclusion is, that stake or other nets in the sea deprive some river or rivers of as many fish as they take. From what is known of the habits of the salmon, I believe this as firmly as if I had attended every salmon in the sea to its own river. Some ignorant and interested persons have been heard to affirm that the salmon spawns in the sea: this has never been observed, and is not possible; for if spawn were to be deposited in salt water, as before observed, it would perish. If it were true, the salmon would not enter the rivers at all. It has been said, that stake-nets intercept but very few salmon that would go into a river; that most of those taken would have been devoured by porpoises and seals, or have gone out to sea again, and have been lost. Granting the first allegation to be true, it is not an argument in favour of stake-nets, but a powerful one against them; for it is absurd to suppose, that because the seals and porpoises are deprived of what they would have eaten, they would refrain from pursuing salmon. They are only driven by this deprivation to devour what would have escaped them had the stake-nets been out of the way; and thus all the salmon taken in a stake-net are a clear loss to the rivers, which cannot make it up as the porpoises and seals do. With respect to the other allegation, that the stake-nets capture only such fish as would go out to sea and not enter the rivers, I do not believe it. It is attempted to be proved by fish being caught both during the flow and the ebb of the tide. This, however, proves nothing; because the salmon do not all make directly, in a straight line, for the river, but swim in all parts of an estuary indifferently. If they did not, but kept the main channel, they never would come to the stake-net at all. The fish coming up with the tide, if they do not reach the river before the tide turns, drop down and renew their attempt with the help of the next tide. They may be turned for a time by their foes; but whatever be the cause of their wanderings, their instinct impels them towards the river sooner or later, which they will enter or perish; and when they do enter a river they will not leave it, if they be not removed, until after they have deposited their spawn. All salmon are either male or female; and therefore it is absurd to suppose that they do not all equally feel the impulse to ascend the rivers; could it be proved that there were neuters among them, some arguments that have been advanced by interested persons might be of some weight in favour of sea fishings. That salmon, when they meet obstacles in a river which they cannot surmount, drop down into the pools, and remain there until a supply of water induces them to make another attempt to advance, I know from repeated observation during my practice as an angler. But I consider it as certain that no salmon, having entered an estuary or a river, and been put back by any cause, ceases in its endeavours to return. There can be no doubt, then, that stake-nets, whether placed in the ocean or in estuaries, deprive the rivers of fish to the full amount of the capture.

I am by no means disposed to resist persons, who are already possessed of chartered rights to fish in the sea, from using the stake-net properly regulated. Nor do I conceive that persons who have rights to fishings, and no waters to fish in but the sea, can be equitably excluded from exercising their rights in the sea, and taking whatever fish may come in their way, salmon as well as others. If the spawn and fry of salmon, and the growing fish, be properly preserved, there will be enough for all, as many as can be taken. As salmon from the salt water are vastly superior in quality to fish that have been some days in rivers, I do not see why the interest of the public should not be attended to by encouraging sea fishing. But as it would be going too far, and unfair, to allow persons who have *no right* to fishings to interfere, or to grant *new charters*, no one should be suffered to take salmon in the sea without being able to show a distinct clause in their charters, granting the right, nor to have more than one net on their property. The board of commissioners which I have suggested might have power to inspect the charters of persons who erect stake-nets, when required to do so by any one having interest. I would strongly recommend, however, that no stake-nets should be allowed, until after the measures which the Committee may recommend to the legislature shall have taken full effect in restoring the former supply to the rivers. This will take place in two, or at the most three years, after the regulations are enforced, if the rivers be well watched during close time, and a bounty be given for the

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destruction of seals and porpoises. It may be considered perhaps proper to give some encouragement for the destruction of eels and pike in the rivers and lakes.

I beg leave to remark that there is no analogy between the herring and other sea fisheries, and that of the salmon, in respect to overfishing. Were salmon allowed to be taken at every place around the shores of Great Britain and Ireland adapted for stake-nets, I have no doubt that the fishery would be ruined. I draw that conclusion from the fact that the salmon spawns only in the rivers, and not in the sea like the herring. But even the herring was overfished on the west coast, and has been very scarce on it during nearly twenty years. It will probably in a few years become less productive on the east coast than it has been, while it will recover on the west. But as it is in our power to preserve the breed of salmon by protecting the fish during a certain period, there is, I think, a probability, that by a considerable extension of sea fishing no harm will be done. The police of the rivers must be rendered very efficient in the first instance. I know it to be the intention of many river proprietors to plead, that, if sea fishing be allowed, they must receive some remuneration for the loss of property. In order to settle this question it may be considered proper to enact, that an account shall be taken of the average produce of the principal salmon fisheries during the last ten years; and if it shall appear that in consequence of an extension of the sea fishery the produce of the river shall have diminished during the ten years immediately following the establishment of an efficient police, then the public shall make up the loss to the river proprietors.

In the north of Scotland the rivers generally should not open before the middle of April, and should close on the last day of August. In order to give a fair chance of the early market to upper heritors, the times of opening and closing should apply both to sea and river fishings. But, as I have before observed, the opening of the fishings should be regulated by the descent of the fry and foul fish, as nearly as possible.

I conclude by earnestly recommending to the Committee, to endeavour if possible, in any bill they may offer to Parliament, to give some definition of rights of fishings on the sea coasts. A general clause, *cum piscationibus*, where there can be no fishing but in the sea, may or may not be held as comprehending all fish whatever that swim in the sea, including salmon. There are coasts to which such a right is attached, where no fishing can take place profitably, or at all, without fixed machinery; and wherever such is erected salmon must of course be taken. Such machinery in the exercise of such rights should be declared legal or illegal; and if legal, a right to kill salmon must necessarily follow, as it is impossible to exclude them, and admit all other fish into the machinery. Some charters contain a general clause for fishing on the coast, but except the salmon fishing of particular rivers in the vicinity, but not salmon in the sea. There are doubts about such cases, and it should be declared by law, whether such charters or titles give right to salmon fishing in the sea, though that of the rivers be excepted. The law should declare generally what kind of right allows the capture of salmon in the sea.

G. S. Mackenzie.

Postscript.

The method according to which in my opinion a stake-net should be erected, so as to allow small fish to escape, is this: the stakes ought to have cross bars between them at top and bottom; on these, as well as on the stakes, hooks or broad-headed nails should be fixed, on which the net should be stretched tight, the meshes being four inches square. It is obvious that, though a net should have its meshes of a proper width, if it be permitted to hang losely, the purpose of its meshes being regulated is frustrated. The leaders should be all stretched in the same manner, and all wicker work prohibited. No net should be allowed to extend further than one hundred yards from high-water mark at neap tides, nor to have more than one chamber.

THE following is an Enumeration of Offences for which suitable Punishment should be provided and inflicted, on proof by one Witness before any Justice of the Peace.

1. Opening the fishing, before noon of the day fixed by law for commencing.
2. Continuing to fish after noon of the day fixed for ceasing to fish.
3. Allowing obstructions to remain on the hecks of cruives.
4. Obstructing the scales of cruives.
5. Having illegal hecks.
6. Non-observance of the slaps.
7. Using any means whatever to prevent fish entering cruives.
8. Angling in close time under any pretence for any kind of fish.
9. Being seen with a rod, spear, or net, or other fishing implement, near a river in close time.
10. Using torches or spears at any time.
11. Angling, or seen near a river, with a rod, spear, or other fishing implement, at any time, under any pretence, without written authority from the proprietor or tacksman of the river.
12. Being seen near a net, in or out of the water, without authority, to lay the *onus probandi*, that the net or any interest therein does not belong to the person seen near it, on the person so seen.

13. Killing

13. Killing spawning or foul fish, or fry, or setting any thing in a river that intercepts them.
14. Selling or buying such, or using them.
15. Having fish in possession in close time, whether clean or foul.
16. Having fish in possession at any time without authority.
17. Millers, or others having mills, neglecting to have a grating to keep salmon fry from the wheel.
18. Putting up stake-nets before the time of opening the rivers.
19. Allowing them to stand after the day of closing the rivers.
20. Neglecting to stretch them properly, or to clean them.
21. Having meshes under the regulated size.
22. Neglecting to clean them every tide.
23. Extending the nets beyond the regulated distance from high-water mark.
24. Having more than one chamber.
25. Overlapping coble-nets, or fishing during the night, or having more than one net and coble at one station.
26. Hauling a net oftener than once every half hour.
27. Keeping a net across and hanging in the river.
28. Having a coble-net longer than may be prescribed by law.
29. Having the meshes less than four inches square.
30. Using any means to prevent the fish passing during the intervals of hauling, or throwing stones to drive the fish into the net.
31. Neglecting to return to the river or sea all foul fish or kelts that may happen to be late of returning and are taken.
32. Neglecting to let all male fish pass, or to throw them back into the water if taken during the last fourteen days of fishing.
33. Selling, or curing, or buying salmon under 6 lbs. weight.
34. Kippering foul fish, or buying or selling foul fish kippered, or using it.
35. Having or using watch towers for observing the movements of fish, so as to make an undue capture.
36. Power to be given to seize fishing implements used in close time, and those of poachers at all times.

Appendix, No. 4.

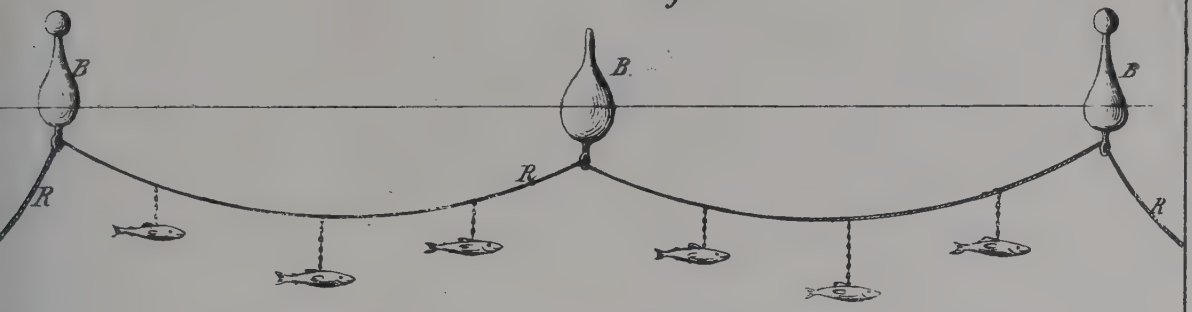
No. 4.

See Plan of the lower part of the Tweed.

SALMON FISHERY.

N°1

Fig. 1.



Manner of setting Bait for Porpoises and Seals, proposed by Sir G S. Mackenzie.

Fig. 2

Fig 3

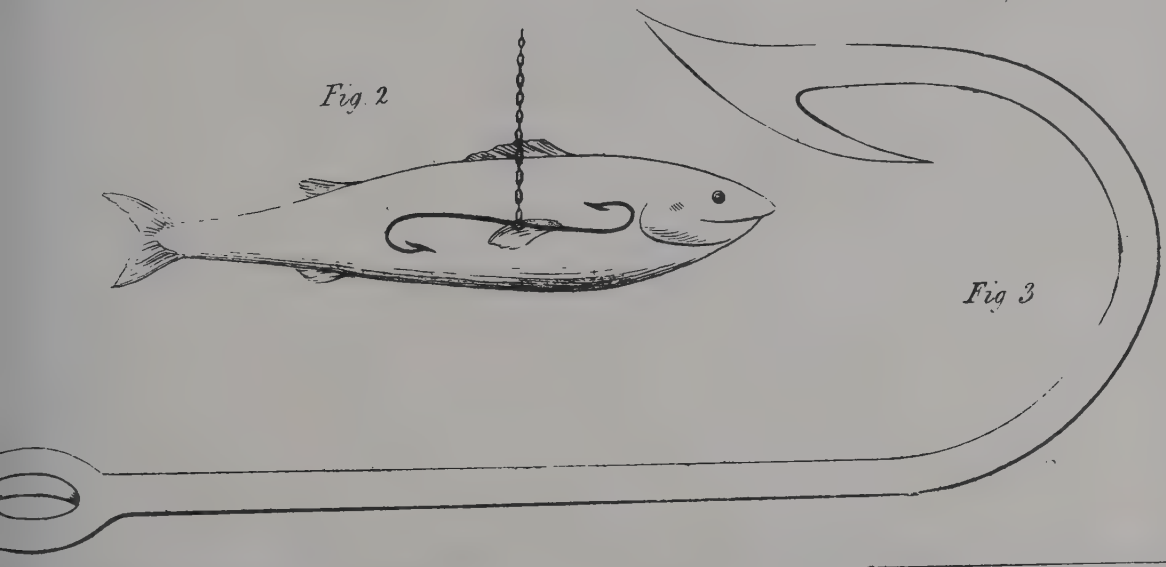
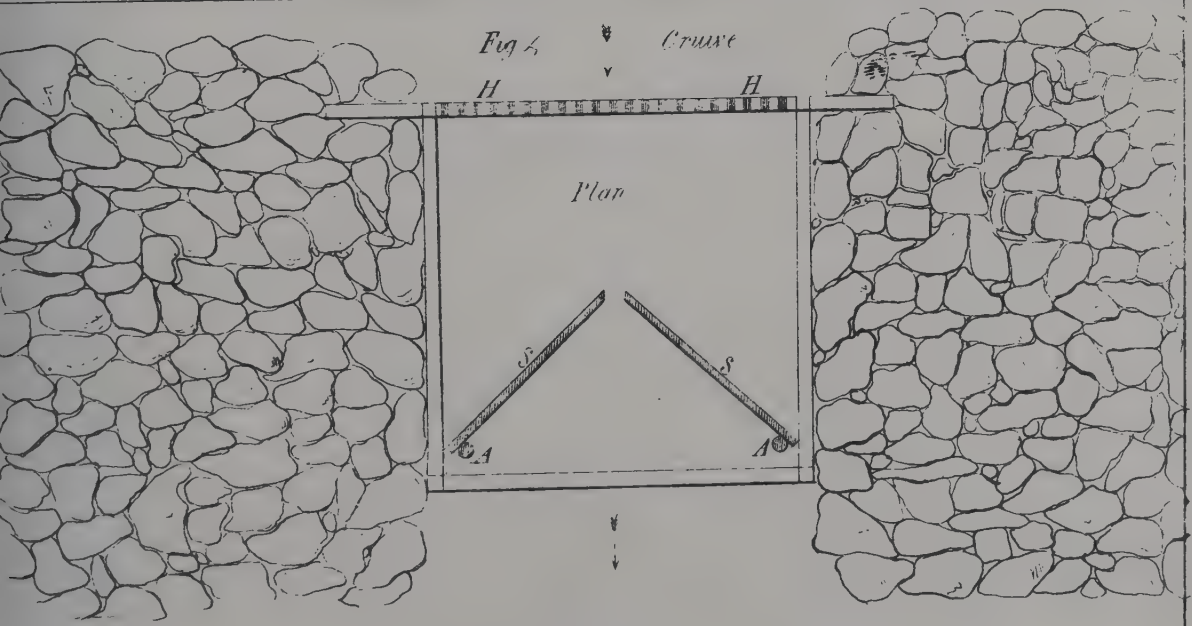
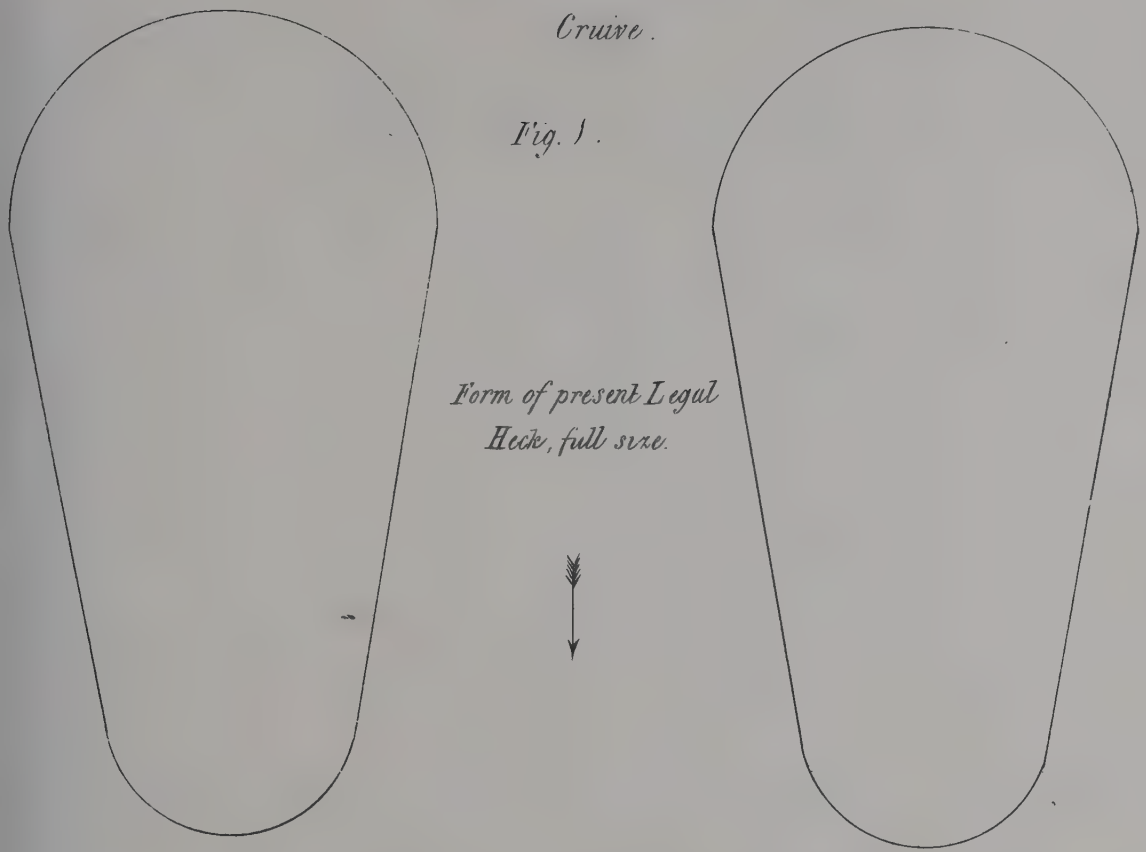


Fig 4. Cruive



Cruive.

Fig. 1.



Form of present Legal Heck, full size.

Fig. 2.

Proposed improved form of Heck, full size.

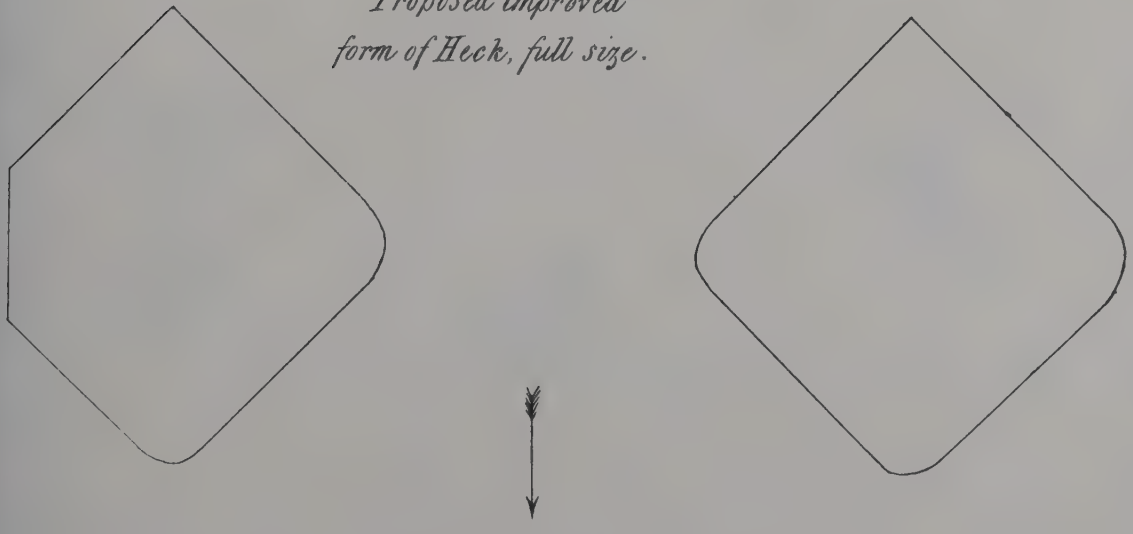


Fig. 1. Improved Cruive Box. Plan.

by Sir G. S. Mackenzie.

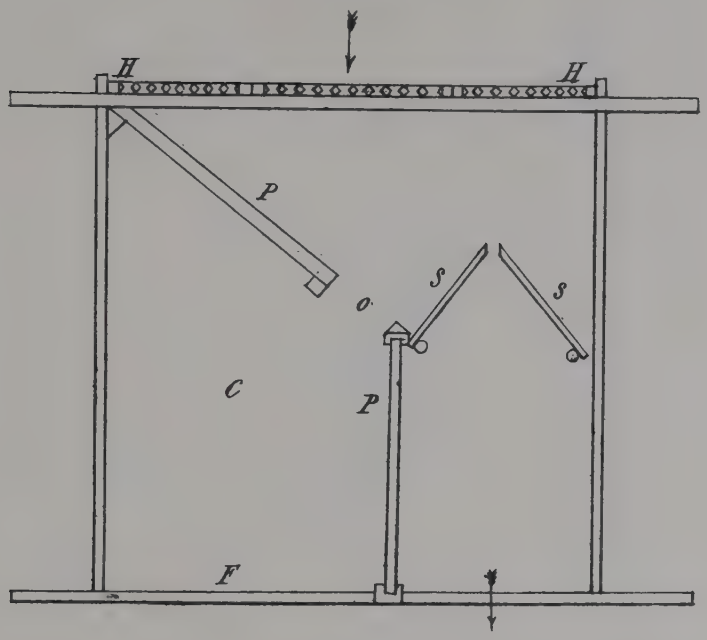
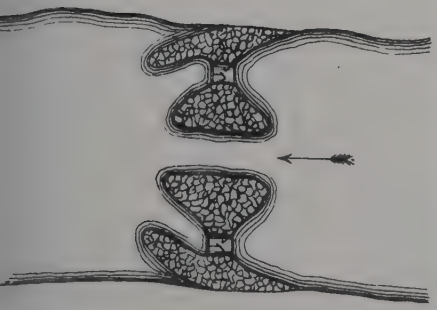
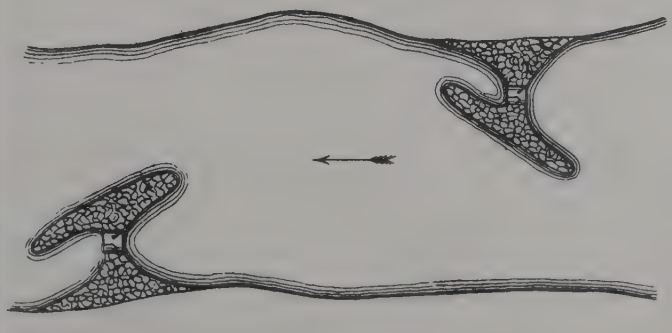


Fig. 2. Form of Cruives proposed to be legalized, where both sides of the River belong to one Proprietor, and there are upper heritors.

Fig. 3. Form of Cruives proposed to be legalized, where the sides of the River belong to different Proprietors, and there are upper heritors.

Proposed by Sir G. S. Mackenzie.





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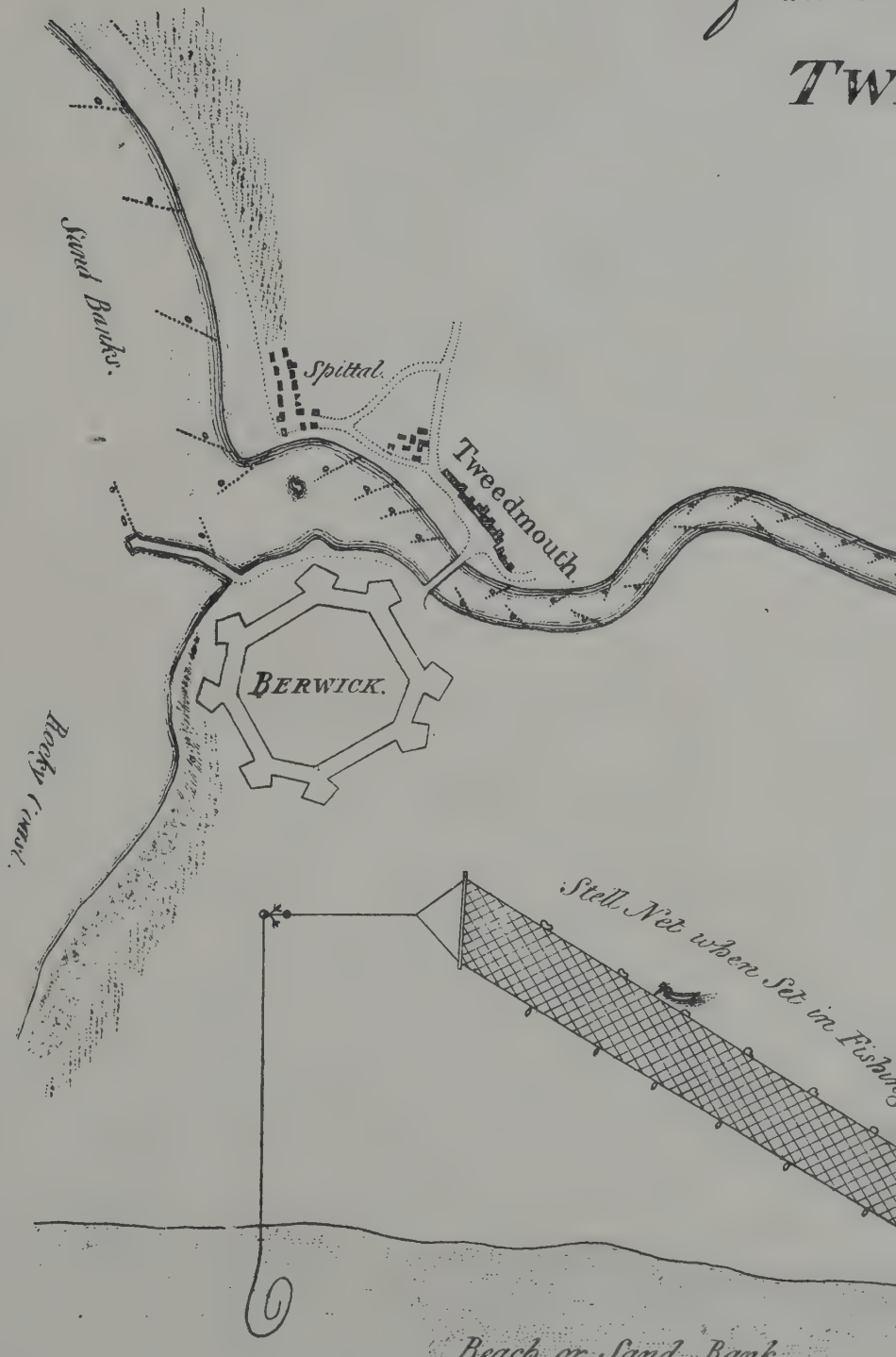

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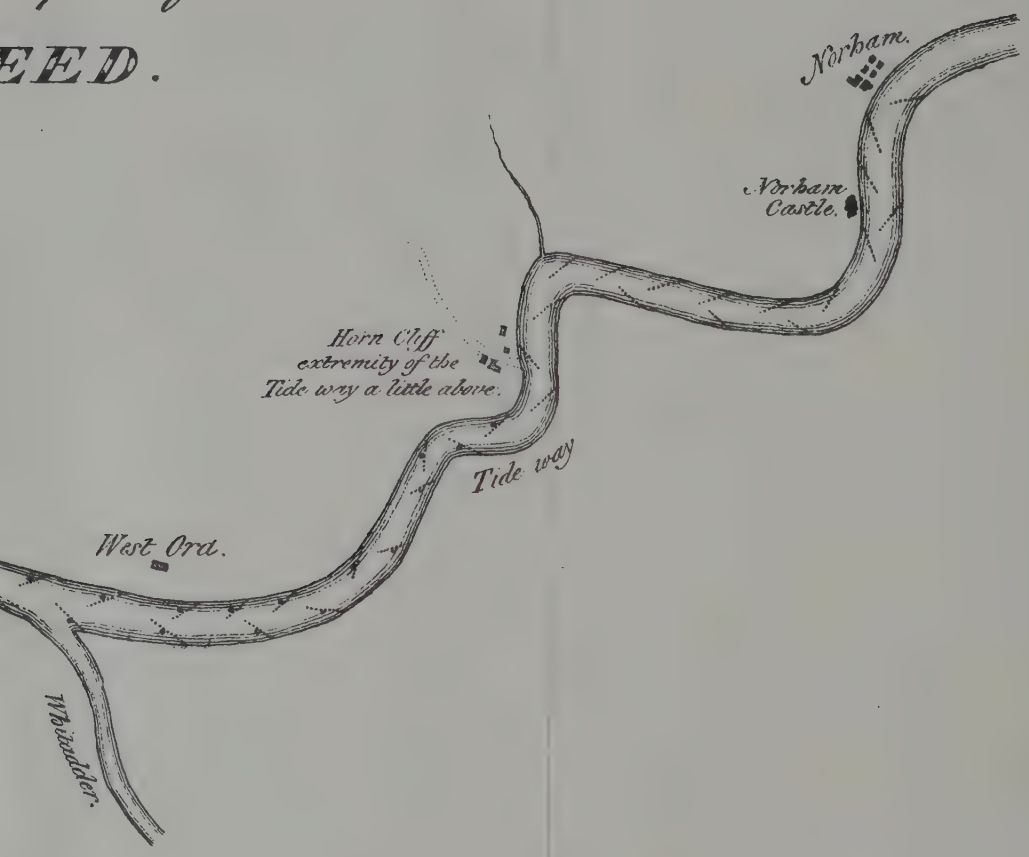

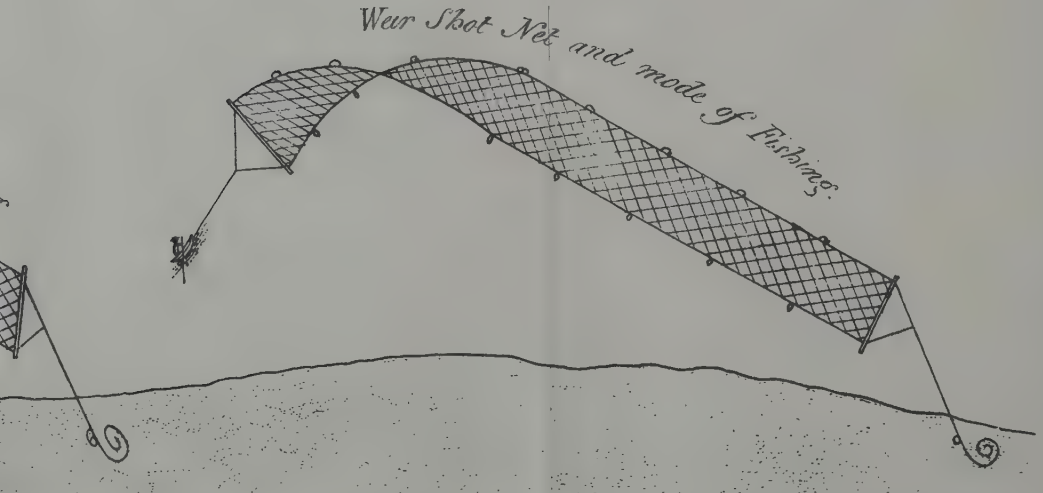

SECOND REPORT

FROM THE

SELECT COMMITTEE

ON THE

SALMON FISHERIES

OF THE UNITED KINGDOM.

1825.

Ordered, by The House of Commons, *to be Printed,*
3 *June* 1825.

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SECOND REPORT.

THE SELECT COMMITTEE appointed to take into consideration the State of the SALMON FISHERIES of *Scotland*, and the United Kingdom, and the Laws affecting the same; and to report the MINUTES of EVIDENCE taken before them, together with their opinion and observations thereupon from time to time to the House:—HAVE pursuant to the Order of the House, examined the matters to them referred, and agreed to the following REPORT:

YOUR Committee have, since their last Report, proceeded in their inquiries into some of the more difficult branches of the subject of the Salmon Fisheries, in particular the important consideration of Obstructions to the free passage of Salmon between the Sea and the upper parts of Rivers and Lakes, where the spawn is deposited, and the young Fish come into life. They have been particularly desirous to consider this point in all its bearings, because upon such free passage being afforded, depends the possibility of the breed being multiplied; and they have approached the inquiry with additional anxiety, because they are fully aware of the delicate ground in some, and of the difficult circumstances in all cases on which they have felt themselves called upon to touch.

In some cases such obstructions exist, connected with the Salmon Fishery, in so far as parties have become possessed of rights to take Salmon by means of those obstructions placed across Rivers, and which can never exist without a greater or less degree of injury. In other cases similar rights are claimed, although probably on no good foundation. And another class of cases, and that of no small magnitude, is, the obstructions arising from the application of Water to the purposes of Manufactures.

Your Committee are abundantly aware of the difficulty of this part of the subject, and while they beg to express the strongest opinion as to the injurious tendency of all obstructions extending across Rivers, they think as each case may be in some degree different from another, the best course they can at present adopt is, to recommend that individuals should endeavour, as far as may be possible, to ascertain the foundation of right on which such obstructions may have been erected, and are maintained, and, except in such cases as those in which the interests of the Salmon Fishery must, and ought to be permanently subordinate to manufacturing and other interests, that persons interested should endeavour to accommodate differences, by uniting in securing a free passage to the Salmon.

Your

Your Committee do not hesitate to say, that the attainment of this object must be the foundation of all future prosperity to the Salmon Fishery, and that individuals who possess a temporary advantage by the enjoyment of an undue facility of taking Salmon, by means of fixed works across Rivers, in many instances mistake their own ultimate and real interest by maintaining them.

Your Committee consider it essential, that this free passage should be afforded during the fence months, or close time, for the purpose of securing the multiplication of the species; and they are equally of opinion, that it should be afforded in a considerable degree during the fishing season, because if those persons in whose property, or within reach of whom Salmon breed, be not permitted to take, when of a mature size, some proportion of the countless multitudes of Fish which their care and protection may bring into life, it is in vain to expect that such care will be exercised, or that any protection will be given, or to hope that any law will be effectual to prevent the injurious practices during the breeding season, which, wherever they exist, almost extirpate the race.

In those Rivers on which large commercial cities are situated, and on which the interests of manufactures have led to the expenditure of vast capital, it is not to be looked for that the Salmon Fishery should flourish; and while it may be from those causes nearly extinct, it would be chimerical to expect that it should ever be restored. Such cases must be obvious, and the Committee by no means wish to make recommendations respecting them, which could end only in failure. But while they wish not to be misunderstood in this respect, they are equally sure that there scarcely is a River in the United Kingdom, in which the Salmon Fishery may reasonably be expected to prosper, on which obstructions do not exist, and on which a vast general and public advantage would not arise from the removal or regulation of such obstructions.

Your Committee have also gone into evidence, at considerable length, respecting the modes of taking Salmon practised in different parts of the United Kingdom, with a view to ascertain the circumstances attendant on each, which ought to recommend it to the sanction, or suggest it to the regulation or condemnation of the Legislature. In pursuing this branch of the inquiry, the end in view has been to ascertain what modes of fishing are adapted to the greatest variety of circumstances, and calculated to secure the largest permanent supply of fish in fine condition, and, being adapted to the habits of the animal, do not interfere with those habits, so as to restrain its vast prolific powers. Such a subject is necessarily complicated in its nature; but the Committee trust their proceedings may not be deemed wholly unavailing, and that the evidence may be considered as containing the ground-work of principles on which the Legislature may be justified in proceeding, in a future session of Parliament, to sanction a measure having for its object the general regulation of the Salmon Fisheries of the United Kingdom.

Although

Although Your Committee were of opinion that they possessed abundant evidence on which to found the Resolutions contained in their last Report, they have, in taking further evidence, excluded no branch of the subject, but have availed themselves of the full extent of the information of all witnesses who have come before them. The testimony of some witnesses may appear to militate against the opinions which have been expressed by Your Committee, but they beg to state, that, upon the whole, they have not seen cause to alter the opinions which they have already formed; and they report the evidence with a conviction, that when fully examined and understood, it will be felt, that while anomalies and exceptions are to be met with, no great or permanent good can be effected without an adherence to uniform principles, which, if called into full operation, will, even to individuals, much more than compensate the partial sacrifices which the adoption of sound and general principles may call upon them for a time to make.

In conclusion, Your Committee cannot refrain from expressing an opinion, that the Salmon Fisheries of the United Kingdom are eminently deserving, and greatly stand in need, of the protection of the Legislature; and that there is every reason to believe, under the influence of a general law, founded in sound principle, that they might rise to an importance and magnitude hitherto unknown.

3 *June* 1825.

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Appendix (No. 1.)

MINUTES OF EVIDENCE.

Jovis, 21° die Aprilis, 1825.

THOMAS FRANCIS KENNEDY, ESQUIRE,

IN THE CHAIR.

[*Henry Home Drummond*, Esq. a member of the Committee, delivered in a plan of the Dam Dyke, and part of Waterway, with hecks and sluices, as proposed to be erected on the site of the Old Dam on the river Teith at Lanrick*; together with a copy of an Obligation†, by James Finlay & Co. of Glasgow, proprietors of the Deanston Cotton-works, on the river Teith in Scotland.]

Henry Home Drummond, Esq. Examined.

H. H. Drummond, Esq. 21 April, 1825.

CAN you state to the Committee whether the agreement which you have just now delivered in, is expected to be satisfactory to the proprietors of the salmon fisheries on the river Teith?—It has been agreed to by the proprietors of the salmon fisheries on the Teith, and on the Forth, into which the Teith runs; and the buildings are now about to be carried into effect accordingly.

Is it your opinion, that the principle upon which this arrangement has been made may be generally applicable in cases of dams, the application of course varying according to circumstances?—Certainly, I think so; and as a proprietor of a small salmon fishery on the Teith, I did every thing in my power to promote the arrangement in question.

Mr. Adam Cottam, called in; and Examined.

Mr. Adam Cottam.

WHERE do you reside?—At Whalley, near Blackburne.

Have you had any opportunities of being acquainted with the salmon fisheries of any of the rivers in Lancashire?—I have, both on the river Lune, at Lancaster, and also on the river Ribble.

Was the salmon fishery on these rivers at any time of great or of considerable value?—Upon the river Ribble they were of very considerable value from forty to fifty years ago, a considerable way up the river.

Do they remain of the same value, or have they decreased?—They have decreased most materially.

Do you consider that the decrease has arisen in any considerable degree from obstructions on the river to the free passage of the fish to and from the sea?—Certainly I do.

Be so good as state what those obstructions are?—At present it arises from a private fishery about two miles above Preston, on the river Ribble.

Are there any other obstructions not connected with the fisheries?—Yes, there are. There is a wear near Clitheroe, a stone wear, over the river Ribble.

Will you state the nature of the obstructions to which you first alluded, connected with the private fishery?—The obstruction respecting the private fishery near Walton is by the undertaker, who has the fisheries belonging to Mr. Tarrington, Sir Henry Houghton, and Mr. Ashton.

Of

* Vide Appendix, No. 3. Plan V.

† Vide Appendix, No. 2. p. 162.

Mr. Adam Cottam.

21 April 1825.

Of what nature is the obstruction?—By setting nets across the river night and day. A net is set across the river above that: he puts one net in and another out during the twenty-four hours.

Do you mean to state that a net is extended across the river and never removed?—Never removed, excepting some inspector happens to go down, and then he has a man near at hand to loose one end.

During what part of the year is the fixed net continued in that place?—From the 12th February to the 1st October.

Do you consider that such use of a net is illegal?—Certainly. There have been numbers of persons taken before the magistrates, but owing to the defect of the law they cannot convict.

Is there a local Act applicable to that river?—There is an Act made in Geo. 2d's reign, limiting the time of fishing; but that Act is so very deficient that the magistrates cannot convict.

What is the size of the mesh of the net which is stretched across the river?—I am afraid it is considerably under the Act of Parliament. It is a totally illegal net.

What is the size of the mesh?—I believe not more than an inch.

Has this net, in point of fact, the effect of preventing salmon ascending to the upper parts of the river?—Certainly.

Were there at any time salmon fisheries above that part of the river?—About forty years ago there were many, particularly Mr. Weld's of Stoneyhurst, Mr. Peter's of Duncan Hall, Mr. Beaumont's of Whitley, Mr. Taylor's, Lord Grantham's, Colonel Bolton's, Lord Ribblesdale's, Mr. Yorke's. These I am particularly acquainted with.

Have these fisheries in point of fact ceased to exist since the use of the net across the river which you have described?—Since that they have very much decreased indeed.

Are there any wears on the river Ribble connected with the salmon fisheries?—Not connected with the salmon fishery: there was one at Brockle, but that was pulled down.

Under what circumstances was it pulled down?—It should have been litigated at Lancaster various times, and the last time it was referred by both parties to myself.

Was it by your means that an arrangement was made which led to the pulling down of the wear?—It was. After I had expended upwards of 100*l.* out of my own pocket in getting plans, &c. complaint was made to me that I was not making a fair escapement, on which I found myself aggrieved, or at least my character so injured, that I immediately gave it up, and wrote both to the plaintiff and defendant to that effect. Sir John Shelley then wrote to me, and begged I would continue it: I told him that I could not with propriety. Immediately after that a fresh action should have commenced, but the owner of the upper fisheries agreed to give Sir John Shelley a certain sum; I do not know what exactly, upwards of 1,000*l.* for the right of his mill. Immediately upon that it was pulled down, not a stone remaining.

Are there any other wears on the river connected with the fishery?—Not connected with the fisheries. There is one at Clitheroe that I mentioned, erected across the river for the purpose of a very large factory.

At what time was it erected?—I think within twenty years.

Is it injurious to the salmon fisheries?—Certainly; so much so, that I am certain that for the last two months there has not any water whatever gone over the wear, but the water flows through the mill-goit. Of course the fish in the river follow the stream; they cannot get any further than the water wheels.

Have the parties erecting the wear a right so to do?—I apprehend not. Lord Ribblesdale made a complaint against it, but I believe it is not yet mended.

Is there any litigation now in progress respecting it?—An attorney said he had instructions about it, but I know no further.

What is the height of the wear?—I suppose it may be from six to seven feet perpendicular, but on the west side there is a natural rock.

Is it built of solid masonry, or loose stone?—Solid masonry, in the direction of a half moon.

Is the water carried to the mill for the purpose of driving an undershot or an overshot wheel?—An undershot wheel, a wheel about twenty-four feet diameter.

Do the fish get into the mill stream?—They certainly get into the mill stream, and can go as far as the wheel. About a year ago I went over to see some alterations

Mr. Adam Collam

21 April, 1825.

tions they were making respecting the power-loom in the mill, and the moment the men were discharged at twelve o'clock, I saw a net hung up in one corner dropping wet. That net I apprehended had been taken from the foot of the wheel.

Is there any opening in the wear by which salmon can ascend to the upper parts of the river for the purpose of spawning?—No; it is a solid wear.

Without any escape whatever?—Without any escape whatever.

What width is the river where this wear is placed?—I suppose seventy yards broad; I only judge from a bridge that is below.

Is this the only wear on the river Ribble?—There is one above, at Sawley; it is a mere nothing; it is not elevated above a yard, and it is a perfect inclined plane: The salmon could get up at any time.

Do you imagine that the salmon fishery of the river is injured at all by the admission of any poisonous or deleterious matter?—I am not aware of any, except at this mill; there are some gas-works close to the river, the gasometer is not ten yards from the river.

Do you know in point of fact, that the refuse of the gas is admitted into the river?—Certainly not.

Are there any wears upon the Lune?—There are two, one immediately above the new bridge at Lancaster, with two or three locks upon it.

Are those wears injurious to the salmon fishery?—Very much so; that I am now mentioning is not so much so as one belonging to some person at Halton.

Are those wears constructed for the purpose of machinery?—The lower one is entirely for the purpose of taking salmon.

Is that a wear that has been established for a considerable time?—I apprehend it has been established forty or fifty years.

Is it therefore admitted to be the exercise of a legal right?—That I believe to be so. There is one higher up at Halton, where there is a mill, I believe both a cotton mill and a corn mill. That wear has been so altered within the last twenty years, that salmon cannot get up it. About five years ago I was sent to view the wear, and I saw upwards of seventy salmon attempt to get up it, and not one of them could get up.

What is the height above the level of the water?—Perhaps eight feet; it is an inclined plane, and above there is a sort of projection. One salmon, about fourteen pounds, about the middle of the river attempted to ascend it, and it struggled so hard that it gained the side and absolutely laid itself down near my foot, and I might have taken it in my hand; it made an effort again, and went down below.

Are there any traps or other contrivances on the wear for the purpose of catching fish?—There are two or three connected with the wear.

Describe them?—They are the usual traps; the spaces ought to admit a fish of at least four pounds; I can scarcely get my thumbs in; I attempted to put my hand through, and I had nearly caught it fast.

What sort of trap is it to which you refer?—The usual locks; a sort of trap where they go into a box; the moment a salmon has got there (or any other fish), if it cannot get through the spaces above, it remains till it is taken out by the nets.

How long have these traps existed, connected with the wear?—I apprehend thirty or forty years.

Are they considered to be warranted by law?—They are.

Has any attempt ever been made to remove them?—Certainly there was, and there should have been an action, but it was referred to Mr. Coltonam.

What was the result of the reference?—The grievance was to be abated, but it never was.

Upon what ground then do you state the traps were considered to be illegal?—I cannot say that.

Do you mean the Committee to understand that the result of the reference was, that an alteration was to be made in the traps, or that the traps were to be entirely removed?—An alteration was to be made in the traps and the wear, so as to remove the grievance.

Are those traps removed at any season of the year, so as to admit the fish to go up to spawn?—There are certain parts of the year, but I cannot mention them, when these traps should be entirely removed, so as to give free admission to the fish up.

Are they, in point of fact, removed so as to give such free admission?—They are not.

Did the proprietors of salmon fisheries make an effort to have them removed,

Mr. Adam Cottam.

21 April, 1825.

for the purpose of admitting the fish to spawn?—There was a trial that should have been had at Lancaster, and it was finally referred to Mr. Coltonam.

Do you mean to say that the reference which you have mentioned has been attended with no effects whatever?—With no effects whatever thus far.

Is it your opinion, therefore, that fish are very much obstructed in going up for the purpose of spawning?—Certainly they are.

Do you conceive that the rights of private parties in these wears might be preserved, and at the same time that proper regulations might be made for the admission of the fish to spawn in the upper parts of the river?—Certainly there might, and I think it would be for the benefit of all parties.

What are the regulations which you would recommend and think proper for that purpose?—I would recommend that the seasons of fishing in the river should be altered, not to commence before the 1st March, nor to fish later than the 1st October; and during the winter season, if the locks were kept properly open, that the fish could get up, I think it would be a benefit to all parties.

Do you apprehend, that in the state in which matters are, a great many fish are taken when proceeding to the spawning grounds?—A great many.

Do you attribute to that cause, in a considerable degree, the diminution of the fisheries?—I certainly do.

Are you aware of any poisonous matter being admitted into the river Lune from any manufactories?—I am not.

Have you any interest in or connection with the property upon either of these rivers, the Ribble or Lune?—None at all. I beg pardon; upon the river Ribble I am agent for Mr. Ashton, who has a private fishery.

At what part of the river is Mr. Ashton's private fishery situated?—About one mile and a half above Preston.

Is it below or above the point at which the net is placed across the river?—Below it.

Do you consider that even your fishery below this net is injured by this obstruction?—I will answer that question, if you will allow me, as agent to Mr. Ashton. Before the wear was pulled down he told me that he would not be against a public concern; at the same time he thought it hard that his own private fishery should be injured. Two years after the wear was pulled down his fishery increased in value considerably. The person who has the fishery now was a witness with me upon a fishery cause, upon the river Kent, when I asked him the following questions:—"Pray, what was the greatest quantity of fish you ever took in a day before the wear was pulled down? I have taken from fifteen to twenty-five salmon in a day, twenty-five is the largest number. Have you ever taken any more since the wear was pulled down? Yes, I have taken 120 in a day." That was two years after the wear was pulled down.

Did he use the same means of fishing?—The same means of fishing.

Was it with a net?—With nets.

What effect has been produced upon this fishery by the use of the net across the river?—It has obstructed them so much that few, if any, can get up, particularly this dry spring; I have not heard of a single salmon getting up at all.

Whether do you consider the wear which was pulled down, or the net which has been since placed across the river, most injurious to the salmon fishery?—I think the net is equally as injurious as the wear was.

If the net, which you have mentioned on the river Ribble, were permanently removed, should you consider there was then any obstruction to the success of the salmon fishery on the river?—I should say there was no obstruction till you came to the wear at Clitheroe; that is about twenty miles above the other.

Is that for the purpose of driving a mill?—The wear is for the purpose of turning a cotton and power-loom mill.

With a perpendicular wear?—A perpendicular wear across the river.

Up which no salmon can come?—None; except in high floods.

What is the height of the wheel?—The wheel about twenty-four feet.

You stated that, upon the removal of the wear below, the salmon fishery increased; I wish to know whether since the use of the net across the river, it has again decreased in a similar proportion?—It certainly has decreased in as great a degree as it had before increased.

What was the interval between the taking down of the wear and the introduction of this net?—I apprehend about two years.

Do you mean, then, that an increase took place during these two years, and that since there has been a decrease?—Certainly I do.

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With reference to the wear at Clitheroe, is it your opinion that sluices could be made in it, to be opened at certain times, which would have the effect of permitting the salmon to ascend when there was a flood in the river?—I apprehend there might be to that effect; but the more satisfactory mode for the landholder would be, to erect one or two wears below, so that they might not rise above three feet at a time. *Mr. Adam Ostlam.* 21 April, 1825.

By which means the salmon would at several leaps be able to conquer the whole obstruction?—The obstruction would be then removed.

Do you apprehend that such a change in the construction of this wear could be effected, and at the same time serve equally well the purposes of the wheel?—Certainly; and that is what Lord Ribblesdale and the gentlemen above want.

Would such a change in the construction of the wear be attended with very large expense?—Not very large, because it has a rocky bottom.

Can you conjecture what the expense of such a change might be?—I apprehend some 600*l.* or 700*l.*, whereas there has been an immense sum laid out upon the mill.

Is it your opinion, then, that by such a change in the construction of this wear, the interests of the mill and of the owners of the salmon fishery might, in a great degree, be reconciled?—Certainly; completely reconciled.

Should you consider it important that some sort of grating should be fixed to the entrance to the mill stream, by which it should be rendered impossible for fish to leave the river, and to get into the mill?—There certainly ought to be some sort of means.

Do you consider that the proprietor of the mill can have any interest to object to such an arrangement being made?—I think not.

John Hotchkis, Esq. called in; and Examined.

WHERE do you reside?—At Llanrick Villa, in the county of Brecon. *John Hotchkis, Esq.*

Have you had any opportunity of being acquainted with the salmon fishery in that part of the county?—I rent a salmon fishery of the Duke of Beaufort, of nine miles there.

Can you give the Committee any information respecting the state of the fishery, or what you may consider the causes of its decrease?—It has not materially decreased since I have held the fishery, which is now eighteen years; but the cause of so few salmon being in the river, is the Trostrey wear, down at Usk.

Do you mean to state that the salmon fishery had decreased before you entered upon it, and that it has been smaller ever since?—Yes, it had decreased, from what I heard. The winter before last the wear was carried away by a flood, and in the spring of 1824 we took more salmon than we have at any other time.

Has the wear been rebuilt?—Yes, it has.

Is your fishery above or below the wear?—A long way above, twenty miles above.

Can you describe this wear?—Perfectly. It is formed diagonally upon the river, and it is not less than 400 yards in length, I should conceive between 400 and 500; the consequence is, that to bring a salmon over that, it requires, as near as I could remark up at my property, at least thirty hours heavy rain to raise the river equal to bring salmon over it; that it required a column of water equal to two feet perpendicular before the salmon could get over the wear. The wear is ostensibly to drive a mill; now the mill is of little or no value, and the present renter of the wear pays, for the wear alone, 100*l.* a year, (as I understand,) for taking salmon in the boxes. The mill has long ostensibly been held up as the reason for the wear, though I do not consider the mill as of much value. And a very singular fact in this mill: on going to look at it, I observed on the side of the dam two wide folding doors; coming to ask the miller the question, he says, it is to let the water through the mill, when there is a high flood.

For what purpose is the mill?—For grinding corn.

Is there no escapement?—None in the world, except through the traps.

Are there any means expressly for the purpose of taking salmon?—Three boxes, for which the present tenant, as I understand, pays 100*l.* a year.

Are those boxes ever left open?—Occasionally, as I have heard.

Do you consider that the way in which this wear and these boxes are used is contrary to law, or that it is authorized by law?—I should conceive there is no law against it, because it has been of so long standing, and nobody ever called it in question.

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If there were sluices, would not that enable the fish to come up?—Certainly.

Is there any other plan you would suggest?—I would suggest the lowering of the wear.

Is there any facility to salmon ascending the river in spite of this wear, at any season of the year?—No, none.

Do you conceive that the parties interested in the wear have a very great object in its being maintained in its present condition?—Yes, I do, most assuredly.

Do you mean that the whole benefit they derive from this obstruction, upon so large a river as the Usk, amounts only to 100*l.* a year?—I conceive their profit is very great.

Do you therefore apprehend, that while the landlord receives only 100*l.* a year, there is a great deal of hidden advantage to the tenants of the mill?—Yes, a great deal. I have no doubt at all that those three boxes could pay a rent of 500*l.* a year.

Do you therefore conceive that the real value of this wear is not known or received by the proprietor?—Yes, that is my opinion. I should mention one thing, that the proprietor having gained an advantage, does not look to further advantage from the property. Formerly, a tenant held one of the most remarkable leases perhaps that ever was granted by a landlord. The former tenant could go upon the lands of Sir Samuel Fludyer when he (tenant) pleased, and cut timber at his pleasure to repair the wear. He went to the court of Chancery, and got the lease set aside, and then the tenant gave up his lease, and Sir Samuel Fludyer lets the wear for 100*l.* a year, as I understand.

How much do you pay to the Duke of Beaufort?—30*l.* a year. I am not the original lessee: a family who have been millers for a number of years retained the mill, and sold the right of fishery, reserving some trifling part of the rights to themselves. They let the fishery to Mr. Craecroft; he sold his right to Admiral Gell; when he died I purchased the property.

So that ten miles of fishery above the wear is worth only 30*l.* and the wear itself worth 100*l.*?—Certainly.

Can you form any idea of what the value of your fishery would be, if this wear did not exist?—No; I consider it would be very valuable.

If the spawning fish were allowed free passage above the wear, would it not be the interest of the gentlemen in possession of this fishery, to preserve the fish to a greater extent than they now do, and would not the preservation tend to increase the number of fish below so as sufficiently to recompense those proprietors in the lower parts of the river for any sacrifice in the wear?—Yes, most assuredly: it would instantly become the interest of any person who had any thing to do with the river. There would be at least one hundred salmon taken for one.

Do you consider that the interest of proprietors of salmon fisheries, from the source to the mouth, are different, if properly understood?—No, I do not. I think their interests are all the same; I think the interests of every proprietor would be benefited by the fish having a clear run up the river.

You consider, on the one hand, that the upper proprietors would receive a portion of good fish, while they, on the other hand, would be interested to protect the general breed of fish, which would materially benefit the lower proprietors in greater fisheries?—Certainly.

What are the months in which fishing is prohibited by law?—I applied to the quarter sessions for them to appoint fence days. The first appointment was the middle of October to the middle of February. In the county of Brecon throughout the fence days are now from the beginning of October to the 27th February; and in the same river, in the county of Monmouth, where the wear is, from either the 1st December to the middle of February, or from the 1st of December to the end of February. We might as well have no fence days at all.

What would you recommend as the period during which the fence days should continue, consulting the interests of proprietors generally on the river Usk, including the upper parts and the estuary?—The fence days which I recommend would be from the 1st September to the 1st March. The reason why I recommend that is from my own observation. When I applied to the quarter sessions to appoint fence days, I got them to appoint from the middle of October to the middle of February: fishing the next year, and angling, I caught a salmon, I think towards the middle of September, with the roe very considerably grown. When the egg ceases to be small the fish is certainly unseasonable, and you are destroying fish that

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that would spawn very soon, and consequently I got the fence days altered to as far as the Act would allow.

With reference to the conclusion of the fence months, what is the ground upon which you recommend the 1st March?—I never saw a fish spawn in March; but I have seen many fish spawn in the middle of February; they are off the spawning beds before the 1st March, and if we have had a flood I have always had fresh salmon in March.

But you consider it right that the salmon which have spawned should be permitted to return to the sea, being unfit for use, before the fishery commences?—Many of them will have returned; there will be many in the river still.

Do you not consider it, generally speaking, desirable that those fish should return to the sea, and not be taken?—Certainly; they are not only unseasonable, but they are unwholesome.

Do you consider that salmon is best in quality when it has most recently quitted the sea?—Most assuredly; I can see a difference in three days. You may judge from this: There is the salmon louse in the gills of the fish coming from the sea; the third day after he arrives where I fish it is entirely gone; but it is very rare that we take them with that.

Have you had any opportunity of seeing or knowing any thing respecting the stake nets in the river Usk?—No, I have not, excepting that there are stake nets over the whole of the Bristol Channel.

Have you any knowledge of them, or their effects?—No other, excepting that they take a great deal of salmon.

Do you think they obstruct the spawning salmon?—Very often a shoal of salmon come, that is known by seeing the porpoises move; the instinct that made these salmon move was perhaps fresh water coming down; by the time they come to go up it has fallen again; they cease going up; they remain about there, and during that time are the prey of porpoises. If there were no stake nets I conceive the greatest number of those salmon would be lost to the community.

Are there no spawning fish among those that the porpoises drive in?—At all times of the year the salmon come in shoals; if they are fish going up the river ready to spawn they equally must wait for fresh water with the other. If the fence days were at proper times there would be no stake nets down. No stake nets, I conceive, should remain in the river on the fence days. There you must take your chance.

Do you not think the fry are taken in these nets?—No, I do not indeed, not if they are proper meshes; without they were proper meshes the fry would be taken.

You cannot speak from your own knowledge?—Yes, I speak from my own knowledge of that part of the economy of the salmon. You will never see fresh salmon in a river without rain; they come from some little distance, from where the river disgorges; they come and are ready to go up; the water fails them, and they remain there; if you do not take these fish the porpoises will take them; the porpoises are there as long as the shoal of salmon is there; whenever the porpoises come, the fishermen are off.

Do you conceive that if proper fence months were adopted, as well as all means of fishery prevented during the fence days, that the public in general would benefit by the use of these stake nets as well as others, during the fishing season?—Yes, very much, and not injure the fisheries above; all gentlemen whom I have talked with, do not look at the stake nets in a proper sense with regard to the upper fisheries, they look at them partially.

Is it the opinion of the witness, that if it was not for the use of stake nets a very considerable portion of good salmon would be prevented from the want of water ascending the rivers, and from which the public would be wholly debarred?—That is my opinion; it is my opinion that the public would lose a great many salmon indeed.

Is it your opinion that by stake nets being in the sea the quality of the salmon taken by them is the very best?—Of the very best quality.

Is it the opinion of the witness that a close time weekly, say from sunset on Saturday to sunrise on Monday morning, by giving periodical freedom to the fish, would be advantageous to the fishery generally?—I cannot say as to that; but I would certainly advise, always having in view that the fence days were what I have mentioned, that the fishing in every salmon river should not begin till sunrise and that it should cease with sunset, and that no nets should be set between sunset and sunrise.

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Is the witness aware that the Trostrey wear, of which he has already spoken, is used for the purpose of driving a mill?—Yes.

Is the witness aware of the height of the wheel?—I judge it is twenty feet diameter, I do not think more: it is an undershot wheel.

Does the witness know the width of the river at that place?—The length of the wear which keeps up the dam that this mill is on, is, I judge, not less than 400 yards, but it may be five.

In dry seasons does all the water go through the mill race?—Through the mill race, and the boxes set to take the salmon. A little flood will not bring a sup of water over the wear.

Has the witness made any calculation what quantity of water is required to carry fish over the wear?—Two feet perpendicular.

Could the witness suggest any alterations in the wheel, by which the same power would be secured to the mill, and which would improve the condition of the wear?—Yes; always having in view that the mill is a mere stalking horse. The wheel works with a paddle, two feet; suppose they reduced the diameter four feet, whatever the proportion of length of lever that you cut off, if you throw that on the breadth of the wheel, of course you increase the power by making the wheel of a smaller diameter.

Is it your opinion that the owner of this mill might have as great a power of water to drive his machinery as he now has, if he were to reduce the diameter of his wheel four feet, and thereby be enabled to reduce the height of his mill dam two feet?—Certainly, most assuredly.

You conceive that this would be effected by adding to the width of the wheel in proportion as you reduced its diameter?—Exactly.

Would that be a cheaper way of giving access to the fish up the river than by a succession of wears?—Greatly, no doubt of it.

Do you apprehend that the means resorted to within the mill for taking salmon are contrary to law?—That I cannot say.

Lunæ, 25° die Aprilis, 1825.

THOMAS FRANCIS KENNEDY, ESQUIRE,

IN THE CHAIR.

Lord Viscount Clive, a Member, called in; and Examined.

Lord Viscount Clive.

25 April. 1825.

CAN your lordship give any information to the Committee respecting the salmon fisheries in the upper part of the Severn?—I am possessor of a salmon fishery upon the river Severn, near Poole Quay. The best fish that are taken are commonly in the winter months, from November, December and January; those which are taken in the summer months, in July, are very inferior fish, and people are always ill disposed to purchase them.

To what portion of the Severn does your lordship apply these observations?—To the Severn in the neighbourhood of Welsh Poole; the fishery extends from Poole Quay, which is the first wear upon the Severn, to about two or three miles below where the Severn ceases to be navigable.

Can your lordship state the distance by the course of the river from Worcester or Gloucester?—I cannot. From Shrewsbury I think it is between fifty and sixty miles.

Can your lordship state what the average number of salmon may be which are taken in the fishery to which you have alluded annually?—I should think not exceeding seventy fish; but I am not prepared to answer that question directly, though I could get any information the Committee might wish in the course of a few days on the subject.

Are there any other rivers with which your lordship is acquainted, and respecting which you can give the Committee any information?—There are two rivers, the Dovey and the Tivy, which flow into Cardigan Bay; the salmon of which are always in the best season at the period when the Severn salmon is in the worst condition. I am not much acquainted with these rivers, but I know this practically, being a frequent purchaser of the fish that are caught therein.

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Lord Viscount Clive.
25 April, 1825.

Has your lordship any occasion to know whether, when the fish are caught in the Severn in the months of November and December, they are advanced towards spawning?—I conceive they are; but I cannot speak very positively upon the question.

In the Dovey and the Tivy, are the fisheries to which your lordship has alluded at a greater or less distance from the sea than the fisheries on the Severn, of which you have spoken?—The fisheries on the Dovey and Tivy are within a very few miles of the sea. The fishery below Mallwio is, I should suppose, not more than from thirty to forty miles from the sea. The distance of the fisheries upon the Tivy I am not much acquainted with, but they are within a very few miles of the sea.

Mercurii, 27° die Aprilis, 1825.

HENRY HOME DRUMMOND, ESQUIRE,

IN THE CHAIR.

Major Colthurst, 97th Regiment, called in; and Examined.

Major Colthurst.
27 April, 1825.

ARE you a proprietor of fisheries?—I am not a proprietor, further than having land on a tributary stream, called the Dripsey, that runs into the Lee.

Have you any particular circumstance to state to the Committee, with regard to the fishery in the river Lee?—I have with the wears. The salmon wears, on the river Lee, are never opened at any period of the year, for the purpose of increasing the species; and it is highly necessary that something should be done to place the river Lee upon the footing, and under the same protection, as other rivers in the kingdom of Ireland.

How does it happen that the river Lee is not under the same protection of the law as other rivers?—I am not prepared to answer that question; but as far as we have discovered, it was from some stupid idea that salmon were in season during the whole year, and that, therefore, it was not necessary to protect them; that is the reason that is commonly assigned for it.

In what county is the river Lee?—In the county of Cork.

Is there any particular exemption, by statute, that affects this river?—I have been told that there is a law that exempts the river Lee, with others in the kingdom, from the protecting benefits of the Inland Fishery Acts; and it is wished that that river should be placed on the same footing with other rivers in Ireland.

Have the proprietors of the wears that you have mentioned, a lawful right to those wears?—They say they have.

Do you know whether they possess both sides of the river; are both in their own hands?—In some cases they do, and others not.

Do you produce a plan of this river?—Yes, a map describing the course of the river Lee, in its neighbourhood, as affected by the salmon wears [*it was handed in*], which, from the circumstance of their never being opened at any period of the year, affect nearly seventy minor fisheries or draughts of a net between them and the source of the Lee, at the lake of Incheeglah and Googaun Burrough. It would also be beneficial, that besides placing the river Lee upon the footing of other rivers, the gates of the different salmon wears and hutches of all the salmon wears upon the different branches of the river Lee at Cork, shall be open from six o'clock on Saturday evening to six o'clock on Monday morning throughout the whole year.

Have you any thing particular to state with regard to the construction of mill dams in Ireland?—I have: mill dams are generally constructed horizontally, thereby diffusing a small proportion of water, passing over them in summer, over the whole surface; whereas if the top of the mill dam was formed rather hollow to the centre, that proportion of water would be confined to a particular space, and thereby afford a more free and easy passage for the salmon up the river. [*Another plan of the wears on the river Lee at Cork, and the hutches, produced.*]

Can you point out any thing in the construction of these wears that you understand to be contrary to the existing law?—Nothing further than that I understand

Major Colthurst.

27 April, 1825.

that they have been raised considerably within twenty-five or thirty years, or forty years.

What is the width between the cross bars of the gate, on the upper side of the hutch?—I cannot exactly answer that question, but I should suppose about two inches and a half.

Are the bars square or round?—The bars are very strong laths, perhaps cut out of two-inch planks.

The Committee wish to know whether, in consequence of the existence of the present wears, which seem to be under no regulation, the produce of the fisheries at the wears has fallen off?—Most materially; so much so that formerly salmon fish was a matter of export from the city, and that salmon now are both scarce and dear: as to the fisheries up the river, those produced something to the market formerly; they never send any now.

Have the wears been heightened of late years?—I am of that opinion.

Do you know it?—It is generally understood that they have been raised.

Are there any hutches in these wears?—There are, I believe, ten hutches in Hayes's wear, and, as well as I can recollect, five in the Sugar-house wear, five or six in the Gill Abbey wear, and about the same number in the Sanday's Well wear.

Now was it the practice formerly to open these hutches during the spawning season for the purpose of permitting the fish to go up the river?—What I have understood was, that perhaps about forty or fifty years ago, when first the Inland Fishery Act was enacted, that this river had the benefit of that Act as well as the others, and that the hutches were opened; but that, from some unaccountable reason, afterwards they appear to be closed throughout the whole year by Act of Parliament, and these people take advantage of that.

And in your opinion the falling off of the fish in this river is to be attributed to these hutches being kept constantly closed, and the dams raised?—Yes, and the general embankments raised; most certainly.

In very high floods are the fish able to get over all the wears?—A few are.

And are a few annually taken higher up the stream?—Yes.

Is there a considerable quantity of fish out of season exposed for sale at the market at Cork?—Certainly.

At what period of the year?—In what are generally considered the spawning months.

You have seen them there yourself exposed for sale?—In considerable numbers. I have seen them sold at $3\frac{1}{2}d.$ or $4d.$ a pound.

Jovis, 28° die Aprilis, 1825.

THOMAS FRANCIS KENNEDY, ESQUIRE,

IN THE CHAIR.

Lieutenant General Sir *Henry Fane*, called in; and Examined.

Lieut. General Sir Henry Fane.

28 April, 1825.

CAN you afford the Committee any information respecting the river Avon, in Hampshire, connected with the salmon fisheries?—I reside upon the river Avon, four or five miles of which river is in my occupation. This river formerly abounded with salmon, the number of which is very considerably diminished within the memory of persons now living. Below the fishery I occupy, upon the river Avon, there are two considerable obstructions to the passage of fish; one, a mill belonging to Sir George Rose; the other, wears, where there was formerly a mill, belonging to a Mr. Jopp. At Mr. Jopp's wears, below the hutches, there have been constructed machines, which I shall call revolving machines, which appear to me, and I believe to every body else, to be constructed *solely* for the purpose of preventing the run of salmon up the river when the hutches are open. They are in the form of a *chevaux de frise*, and are turned by the current of the water. The effect of these machines is, as they revolve, to strike the water, and, consequently, as we suppose, to frighten the fish from approaching these hutches. I have held a correspondence with Mr. Jopp upon the subject of these revolving machines,

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machines, endeavouring to persuade him to remove them; and he has stated to me in reply, that he had erected them in the place of *racks*, which had been previously there. The racks to which he alludes could have been useful only for preventing the run of the fish. There was a similar obstruction—that is of racks, at the mill of Sir George Rose, which is below Mr. Jopp's wears, some of which he has now, I believe, removed, and I have reason to think that he will remove the remainder.

Are the machines which you have described as being at Mr. Jopp's mill placed there throughout the year, or only at certain periods?—Only at certain periods, during the fishing season.

If these *cheveux de frise* were not so placed, and if the hutches were left open, would the salmon have a sufficient run up the river, in so far as Mr. Jopp's mill is concerned?—No doubt.

What is the perpendicular height of the wears, or mill dam, in which those machines are placed?—There are two wears upon the river belonging to Mr. Jopp, below both of which are these revolving machines,—I speak without having minutely examined the hutches, but I should think, at the upper wear, the hutches must be about four or five feet high,—the wear is about four or five feet high, the lower wears rather higher.

Is it then your opinion, that if the hutches are kept open, and that obstructions are not placed there, that the salmon will have no difficulty in ascending?—They will have no difficulty whatever.

Do you know if it has ever been contended that the proprietor of that mill has a right to place either the gratings or those revolving machines there?—I do not know that the right of having racks there has been contended; but Mr. Jopp's right to place these revolving machines has been contended. I do not mean legally contended, but has been reasoned against by myself in a long correspondence, for these two years past; and it was only the accidental death of the surveyor of our river that prevented our taking further steps; that is, myself and some of the other proprietors.

Do you apprehend that in the existing state of the law, it will be in the power of proprietors on the river to secure the removal of those machines?—It is a question of law, and therefore I am unable to answer it. The general opinion amongst ourselves is, that they are decidedly illegal; and we deem the same of the racks, for which they are substituted; because we consider the law *intended* there should be a *free* run of fish from the Saturday afternoon to the Monday morning, while the hutches are open: which free run these machines prevent.

Is it the law on the river Avon that the fish shall have a free run between the Saturday night and the Monday morning?—We conceive so. We conceive it was the *intention* of the law; but they certainly have not had such run. The understood regulation of the river, and what is said to be the habit of the river when salmon were plentiful, was, that all the hutches should be drawn up at four o'clock on the Saturday afternoon, and that the river should remain free until the Monday morning.

Until what hour on the Monday morning?—I suppose about sunrise.

Do you conceive such a regulation has a beneficial tendency?—As a matter of opinion I should conceive it has. Practically, I cannot speak, because since I have resided in that neighbourhood the river has not been left free.

You stated there were other obstructions than that of Mr. Jopp's mill, be so good as to inform the Committee respecting them?—There are several other mills upon the higher parts of the river Avon. I have named two mills, Mr. Jopp's and Sir George Rose's. The next mill upon the river is at Ringwood, but that forms no obstruction to the main stream: the wear that turns the water to that mill is not a material obstruction. The next mill upon the river is Ibsley, but I feel a difficulty of speaking relative to that mill, or those above it.

Do you consider, that with reference to the prosperity of the salmon fishery in the Avon, it is of importance that there should be free access between the lower and the upper part of the river?—I am of opinion that the breed of salmon in the Avon has been diminished so much (as from all accounts it has been) by the obstruction thrown in the way of the fish by these mills which I have named. The foot square opening in a hutch, which is by law enacted to be open at all times, was placed at Sir George Rose's mill in such a situation as that the salmon hardly *could* get at it, and were very unlikely ever to discover it; and at Mr. Jopp's mill the foot square was not only in shoal water, but was also rendered, as I think, inefficient by the revolving machines in its neighbourhood.

Lieut. General Sir Henry Fane.

28 April, 1825.

Have you any observation to make to the Committee with respect to the close time to be observed?—I am of opinion that the hutches are open from Saturday evening until Monday morning, and *all attempts by engines, or otherwise,* to obstruct the run of fish during that close time is prevented, such close time, in addition to the close time during the breeding season, will be sufficient to ensure plenty of fish in our river.

Can you state to the Committee at what period the salmon begin to be in spawn in the river Avon?—I am not informed on the subject as to the period at which the salmon begin to be in spawn.

Can you state at what season the fry come down the river Avon?—The fry are at this time, and during the months of April and May, descending the river in considerable numbers; in larger number now, I believe, than has been the case for several years past, in consequence of the floods during the last autumn and winter, which enabled the breeding fish to pass the obstacles mentioned before.

Are there any circumstances which you can state, respecting the river Avon, which you think bear materially on the subject of the salmon fishery?—I am of opinion that *eel stages,* which are erected at almost every mill upon the river, are highly destructive to the fry. It is currently reported that at some of these eel stages the fry are taken in very large numbers, so much so, that owing to their sale being illegal, the *pigs* are fed with them.

Can you suggest what you would consider a proper remedy for this evil?—The months of April and May are not months when the eels are running in large numbers. I conceive, that enacting that the water should not *be turned over these eel stages,* during those two months when the salmon fry are going to sea, would remedy the mischief which they now do, without material detriment to the proprietors of the stages; a number of these eel stages are housed over, which I conceive to be done solely for the purpose of preventing the detection of the proprietors in catching fry; I know of no other reason. They are housed over, and the houses kept under lock and key.

Then you conceive that housing is no good?—I conceive it can be of no use with reference to catching eels; but that it is solely calculated to prevent the detection of the breach of the law in catching salmon fry.

Should you consider it a beneficial enactment, that it should be illegal for any person to have in their possession, or to use salmon fry?—The law at present enacts that. It is at present an offence punishable to have salmon fry in your possession during the months of April and May.

Can you give the Committee any information of the extent of the decrease in salmon, in the river Avon, comparing any former period with the present?—The fishery in my occupation was held by a family of the name of Brenton, one of which family is now in my service; he has fished the river with his father and grandfather, who occupied the fishery alluded to; and he has told me, that it used to be the practice of his father and grandfather, while they rented the fishery, to draw part of the water, which I now occupy, every Monday and Thursday during the season; and that, upon an average, they caught ten or fifteen salmon upon each day of drawing; that salmon was, at that period, sold at 3*d.* per pound. I have occupied the same water for the last five or six years, and in no one *year,* during the period of my occupation, have I caught so many salmon as they represented themselves to have caught in *one day.* I have very recently questioned the said Brenton as to his opinion relative to the great diminution of the fish which I have mentioned; and he stated his opinion to be, that it was entirely owing to the revolving machines and the obstructions at Mr. Jopp's and Sir George Rose's mills. This is a man of fifty years old, and much experienced in fishery.

Then you consider, from the best information you have, that these revolving machines operate not only to the diminution of the fishery during the fishing season, but to the prevention of fish ascending the river for the purpose of spawning?—Certainly; while they are up and in operation, they must prevent the passage of the fish almost entirely; the foot square only being open for the passage of fish either up or down.

John Hotchkis, Esq. again called in; and further Examined.

John Hotchkis, Esq.

THE Committee understand you are anxious to state to them the effect that wears, in your opinion, have upon the feelings of the persons above them, by depriving them of any interest in the preservation of the salmon?—Yes, I am.

Will

John Hotchkis, Esq.

28 April, 1825.

Will you state to the Committee what it is?—I consider, and indeed I speak almost to a certainty, that at least ninety-nine of the one hundred salmon that are taken below the wear on the river Usk are spawned and reared from ten to five-and-twenty miles above that—ah! seven-and-twenty miles above that. That is, I consider, there is hardly any salmon spawns below that wear at all.

And consequently, by cutting off the ascent of the fish to their spawning grounds, the produce of that river is very much diminished?—I consider it a great hardship and injustice: we rear up, in the county of Brecon, almost the whole of the salmon in the river, and now we get none in return at all; it amounts to a mere nothing.

How does it amount to nothing; what is the reason of that?—From the obstruction that this wear throws in the way; the fish are taken at the wear, and below it, by boxes; both in the wear and below it.

Can you suggest any regulation which might be advantageous to adopt generally, with respect to all wears?—I consider, on every salmon river there should be a floodgate, going through the wear, of a given dimension; I think it should not be less than three feet wide, and it should go through the whole wear, down to the bottom of the river, above and below, and through; and that floodgate, I consider, should be open as many hours as it is shut in the twenty-four—twelve hours every twenty-four.

But would not the owners of the wears generally object to such a regulation?—They would object to it, I think, on this score: they would say, we are losing the water for our mills; now that, in my opinion, is not the reason; the reason is, because the fish get past; they give us the reason, that the water goes from their mill; but that, in my opinion, is not the reason; the reason is, that the fish get past, and they don't take them.

Are you not aware, that there are several wears across salmon rivers, erected solely for the purpose of taking the fish?—Yes, certainly; on the river that I speak of, I consider that the wear is there for the purpose of taking fish.

Lunæ, 2° die Maii, 1825.

THOMAS FRANCIS KENNEDY, ESQUIRE,

IN THE CHAIR.

Murdoch Mackenzie, Esq. called in; and Examined.

M. Mackenzie, Esq.

2 May, 1825.

IN what part of Scotland do you reside?—At Mid Fern, close to the Dornock Frith.

In what county is that?—In the county of Ross.

Are you well acquainted with the salmon fisheries in the county of Ross?—I have been eighteen years engaged in the salmon fisheries there.

To what particular rivers and estuaries does your experience extend?—I have had fisheries in Cromarty Frith, but my experience has been chiefly in the rivers and firth of Dornoch or Tain.

What are those rivers?—There are five.

Please to mention their names?—There is the river Carron, the Shinn, Cassley, Oykell and Ainag.

Are the fishings on those rivers your own property, or are they yours as the lessee?—One is my own property, and of the others I am tenant, with the exception of half the Cassley.

Are the estuary fishings your own property?—Part of them, and of the other parts I am tenant.

Have you been in the habit of distinguishing the fish of any one of those rivers from those of any other?—All these rivers produce a different kind of fish, which are known to the whole of the fishers.

In going from the sea to the river, does it consist with your knowledge that the salmon go to their own rivers respectively, or go promiscuously to all the rivers?—They don't go up promiscuously; each goes up its own river. In the first river we don't get the salmon of any river except its own; they appear all to be fish of one breed or family in each of our rivers. We marked in the month of March 1823, a grilse kelt in the river Oykell, by tying a piece of wire round the body of the fish, immediately above the tail, and in March 1824, we caught the same fish again as

 a salmon,

M. Mackenzie, Esq. 2 May, 1825.

a salmon, of about seven pounds weight, although it was only three and a half pounds weight when we marked it, and it had passed the other three rivers on its way, and we got it again in its own river.

You are satisfied that the fish was what was called the kelt; that is, that it had spawned?—Yes, perfectly.

At what season of the year have you observed that the fish usually quitted the estuary for the purpose of proceeding up the rivers?—They come at different seasons; in one of the rivers they begin to come in the beginning of December, and in another in the beginning of January; some come in the month of February and some in March; all these are clean fish that come from the sea. Much depends upon the season; they come in some seasons earlier than others; in a cold season they don't come quite so soon into some of the rivers.

After entering the river, how long do the salmon remain in the fresh water?—I believe they remain there till they spawn. It is the nature of salmon always to push up the river. In one part of the Shinn there is a fall of about ten feet in height, and the salmon are always leaping up there; but we never see any go down.

You cannot state the time that fish generally remain in the river before they spawn?—We generally suppose that those which come earliest spawn earliest.

How long do you believe the fish to remain in the river before spawning?—I don't believe any person can exactly tell.

You say that it is the nature of the fish to press up the river to deposit its spawn; did you never observe how long they remain in the river for that purpose before they come down after spawning?—We never see any come down till they come as kelts, or spawned fish.

I wish you to define that period?—I said I thought, or I believed, the fish that entered the river earliest spawned first. Last year we got a kelt that came down one of the rivers, the Shinn, on the 10th of August; but, in general, they come down with the winter floods.

When are those winter floods?—In November, December and January, and during the spring. Many of the kelts remain in the river till now, in May. About a fortnight ago, when I left the country, there was about a dozen of them in one pool in one of the rivers. When they remain in the rivers I believe they are very destructive to fry.

How do you happen to know that they devour the fry; have you ever found the fry in them on opening them?—The kelt is a very hungry and ravenous fish; last year there was an otter's nest in one of the rivers, and two or three kelts were found dead every morning there; some of the people who took them told me there were fry found in their stomachs.

You never saw that yourself?—No, but from my knowledge of the fish I believe it.

Have you ever inspected the stomachs of those fish?—No, never.

We proceed now to learn from you, if you please, what are the periods at which you actually commence fishing annually, on each or all of these rivers and estuaries?—We don't begin at any fixed period: much depends upon the winter floods; when they are very heavy we cannot begin; we have sometimes begun to fish upon the Shinn early in December, and sometimes in January, and often on the first of February; we always begin in the rivers in general when we find there is clean fish coming on.

Is there no one period which you could fix as the proper period for commencing the fishing upon those rivers?—The legal close time is from the 26th of August to the 30th November; we might begin to fish next day, the 1st of December, and I believe if we did begin to fish next day we should not do any harm to the rivers.

In point of fact, when do you begin?—At different periods, as I have already stated.

State those periods?—Perhaps there is not two years that it is the same.

Then it depends upon the circumstances of the weather, and not at all with reference to the nature of the fishing? It depends entirely upon whether we think there are fish going. In one of the earliest rivers we have delayed sometimes on purpose, to allow some early fish to run up the river.

Would it not be better to let all those early fish go up the river?—We always send a man to prevent their being killed by poachers, there being no upper heritors There is a fall in the river Shinn, and no salmon can get up that fall except those that

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that go up the river early, and before they become heavy with spawn; and it was for the purpose of allowing fish to go up there to nurse the river, that we delayed beginning so soon.

Do you consider any extension of the close time to be useful for increasing the breed of fish, or preserving it?—I do.

How far would you extend it, from your own knowledge of those rivers?—I think if it were extended three weeks at each end of the season, that it would answer perfectly, both there and all the rivers.

Be so good as fix the days?—Three weeks might be added in August, and three weeks in the other end of the season; say from the 1st of August to the 1st of January. I should think that was the best close time we could have in that quarter.

Do you know any thing of the river Ness?—Not much.

Do you consider the observations you have made as being applicable to your own rivers, to be also applicable in an equal degree to the Ness?—I think they are; I think they would suit all the rivers in that quarter, the Conon, the Beauly, the Alness, and the Findhorn.

Be so good as mention the earliest time you ever began to catch fish?—In December; I could not state the exact days at this time, having no memoranda of them.

Can you mention the latest time?—On the 1st of February. I have sent fish to London before Christmas.

All clean fish?—All clean ones; I never got a foul one at that time of the year.

Is the close time strictly observed in that country by the salmon fishers?—I believe it is; I have adhered quite to it myself. I have given up fishing sometimes on the 20th of August, and at other times on the 1st of August, and even so soon as the 20th of July; and I have invariably set the river Shinn free every year in the middle of May.

Why do you adopt that practice particularly at the river Shinn?—Because there are very few fish go up that river in the end of the fishing season, and the fish are then so heavy with spawn that they cannot get over the fall, and there is very little spawning ground below the fall, and if we don't allow the early fish to go up there would be very few breeders upon the water.

At those times when you have given over fishing before the legal close time commences, was there any quantity of fish in the rivers which were recently come up from the sea?—I believe they are always coming up at that time from the sea.

When there is very little water in the river the fish do not come up?—No; when the water is very low they cannot.

There are certain seasons when there is so little water in the rivers that they don't come up in any quantity?—In the summer season, sometimes.

Was there any quantity of fish, at any time when you gave over fishing, recently come up from the sea?—In some years there might, and in others there might not. In the river Shinn I have given over fishing always about the middle of May, and after that we allow them all to go up.

You now speak of the river Shinn?—Yes.

But the question was as to all the rivers?—There were clean fish coming up from the sea in all those rivers at the time we gave up fishing; and I am certain we might have sometimes caught a thousand kits of salmon and grilse at the very time we were allowing them to go up.

That was in the Shinn?—No, that applies to the whole fishings collectively.

How far does the tide run up?—To the river Oykell.

And the Cassly?—Yes; the tide flows up all the way to these rivers, the ground is so level.

You mentioned the earliest time you ever begun to fish; now mention the latest time that you ever recollect having begun to fish?—The 1st of February is the latest I ever begun to fish in the rivers.

Does that happen frequently?—Yes, because I considered all the rivers as being exhausted, and I was determined to let as many fish up as possible.

Can you state to the Committee any good and valid objection to the prolonging the close time till the 1st of March?—All the fish that would come early into the river would lie in the river till after that time; that is, those that come in January and February would remain in the river and be killed in March or afterwards, in a deteriorated state, and would be good for little; they would be of no service in the river for increasing the number of fish, because they would be all killed after

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the fishing commenced. If the close time were from the 15th of September to the 1st of March, I could very legally kill every breeding fish in three years, in the Shinn, so that there would not be a fish in the river. I don't think that that close time would suit any of the rivers at all; it would be a very great loss to the proprietors, no benefit to the public, nor of the least use to the rivers. I consider the loss of the February fish would be to lose half the value of the river, that is, as to the fishing in the Shinn.

Would it affect the other rivers, the losing the February fish?—It would affect them more or less; we might get the fish a month or two later in a red state, that is, in a deteriorated state.

You are a stake-net fisher?—I have been one for eight years.

Are you so now?—No, there are none in that quarter.

Did the stations of those fisheries belong to yourself?—Some of the principal ones were my own property; one of them was reckoned the best in that frith.

Do you consider the stake nets injurious to the salmon fisheries in that part of the country?—I consider that all the fish they got were intercepted on their way to the rivers.

In so far they were destructive; were the breeders intercepted?—They intercepted a great portion of all the fish that were proceeding to the rivers.

Explain how the injury is done?—In all the stake nets I have had I have seen the salmon of all our rivers, and I could sort the salmon of these rivers in the stake nets, and I never saw any other but the salmon of those rivers in them; some of the stake nets were at the distance of twenty-two miles from some of the rivers; now all these fish, which I knew were the fish of these rivers, I considered as being intercepted on their way to the rivers. I have often too examined the salmon taken out of the stake nets, and at the river fishings in the boil-house, particularly the roes. In the beginning of the season the roe is very small in all salmon; it is about four inches and a half long at that time, and the eggs are about the size of mustard seed.

Are you speaking of the fish caught in the stake nets or in the river?—Of both. As the season advances these roes get gradually larger; and I particularly observed that at every period of the season there was exactly the same increase in the size of the eggs of the salmon taken in the stake nets as in the river fishings, and therefore I concluded that all these salmon must of necessity have been on their way to the rivers.

And those fish would have been intercepted on their way to the rivers, so that the loss would be the same?—Some would have been taken at the rivers, and the others that had escaped would have become breeders.

Do you know any other injury done by the stake nets, except that as to the breeding fish?—I have seen very great quantities of fry in the stake nets in that frith. Whether it be owing to the stillness of the water within the net, or that the fry are afraid of the meshes of the nets, they continued within the chambers of the stake nets till the tide ebbed, and then the country people came down and carried them away in baskets and sacks.

Do you consider stake nets equally injurious at all the stations as in estuaries?—They are most injurious in those parts that are most in the way of the salmon proceeding to the rivers. Salmon go up with the tide always to the rivers, and those stake nets which have most tide are generally most injurious.

Do you consider that there is any mode of preparing the stake nets so as to prevent their being injurious to the rivers?—Stake nets, in all situations where they catch salmon, must injure some river or other. The degree of injury to any particular river depends upon local circumstances.

Do you consider it impossible to construct a stake net so that the salmon fry may not be intercepted in it?—I don't know what is possible to construct.

Are there any stake nets in the frith of Cromarty?—There are, but they are under litigation before the court of session.

Are there any in the frith of Beauly?—Some; but whether they be under litigation or not I cannot tell.

Are there any in the frith of Moray?—I believe there are some there too, and they are also under litigation.

Are there any yair fisheries upon the friths of which you have spoken?—There are yairs in the three friths of Beauly, Cromarty and Tain; and I know that immense quantities of fry are destroyed there; even cart loads.

Do you mean salmon fry?—All kinds of fry; but principally herring fry.

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Do you consider the yairs to be injurious to the salmon fisheries in those districts of which you speak?—I consider them to be injurious to all kinds of fisheries, and illegal also.

Are the river fishings usually let at a higher or a lower rate, according to the circumstance of stake nets and yairs being employed?—When the stake nets were put in the Tain frith I gave nearly double the rent for the river fishings.

Have you ever observed the gills of salmon in the rivers to contain maggots?—I never saw maggots in any of the fish till after they had spawned; and I never saw a spent fish without the maggots; we consider them a sign of their having spawned; and when they go down to the sea, they come up again with the same maggots upon them; and I have been very curious to look at them in the boil-house, in order to ascertain the number that had spawned.

Were they the same maggots that they brought up again?—Exactly the same; I never saw two different kinds; they are all the same; and I have seen hundreds of them return from the sea with the maggots in their gills, and sea lice often upon the same fish.

Describe to the Committee all the obstructions which you know to exist in those rivers, or any of them, to the progress of fish in those rivers, as existing now?—The only obstruction I know in the rivers connected with the Tain frith are the rocks or falls within the rivers, some of which the fish cannot get over at all.

And the cruives?—I consider the cruives a mode of fishing the least severe, perhaps, of all modes of fishing under the legal regulations.

Is it an obstruction to the spawning fish getting up the river?—No.

Have you a sketch of the cruives for fishing upon the river Shinn?—Yes, I have a sort of sketch. [*Here the witness produced a rough sketch of the cruives alluded to.*]

At what season of the year are fish caught in these cruives?—They are caught from the 1st of February to the 15th of May.

Not after May?—No; sometimes we begin before the 1st of February; we open the cruives always on the 15th of May, and let all the fish up at that time, and the hecks or bars are three inches apart; all the small fish go through, and they all pass through after the 15th of May.

Is the Saturday slap observed in this cruive; [*alluding to the sketch*]?—It is because the Saturday's slap is not always opened, that we allow all the fish, after December and January, and after the 15th of May, to run up the river; and this we considered more than compensated for the want of a Saturday's slap.

How long are the fish detained at a time in the inclosure?—Generally five or six days.

Do you consider the fish so detained as being in as good a condition as those that are caught without being so detained?—I rather think that they must be deteriorating, although scarcely perceptible, in that time; that is, they are growing gradually worse.

What is the purpose of detaining them so long?—We run a vessel every week to Aberdeen; and it is in order to have the fish as fresh as possible that we detain them there.

Then you don't use ice for preserving the fish?—We do; but our distance is so great from London that we wish to get them sent off as fresh as possible.

Would it not be better to take them out when first caught, and put them in ice?—We intend to send them now by the mail coach, and not have them detained in the dam at all, to prevent the deterioration.

How long have you been acquainted with these cruives?—That contrivance has been only of a few years standing; it was an experiment; I cannot exactly state how long ago.

Who first tried the experiment?—I was the first that tried it, merely as an experiment.

Martis, 3° die Maii, 1825.

THOMAS FRANCIS KENNEDY, ESQUIRE,

IN THE CHAIR,

Mr. *William Norman*, called in; and Examined.

Mr. William Norman. 3 May, 1825.

WHERE do you reside?—At Totness.

Can you give the Committee any information respecting the salmon fisheries on the rivers in the west of England?—I can, with respect to the rivers Dart and Avon, of which I am Conservator.

Has the salmon fishery decreased in the rivers you have mentioned?—Yes, it has very much.

Within what period?—When I came to Totness, salmon was 6*d.* a pound, and 7*d.* now it is 1 *s.* 6 *d.* and 2 *s.*

Do you attribute that rise in price entirely to the decrease of the fish, and not to an increased demand?—To the decrease, and not to the increased demand. They cannot go up to breed on account of the obstructions.

How long have you resided there?—About fourteen years.

To what cause do you attribute this decrease?—To the wears and hutches. The salmon are also killed by spears. As soon as they come into the river they are speared, if they pass any place; they never come past except in extreme high floods.

Have these wears been erected recently, or have they existed for a long period?—The Totness wear has existed for a long period.

Is the Totness wear the wear which is nearest to the sea upon the river Dart?—Yes; the tide comes to it.

At what distance from the sea is it placed?—Ten miles.

Is the wear maintained for the purpose of a salmon fishery, or for any purposes connected with mills or machinery?—For the Totness fulling-mills, and flour-mills.

Is it understood that the owners of the mills are bound to any regulations for the purpose of saving the salmon fisheries?—I do not know of any regulations.

Can you describe this wear, or have you any plan which would explain it to the Committee?—Yes, I have. [*Produces plan.*]

Is the Totness wear in the same situation now that it was a considerable number of years ago?—No; it is not as it was when I attempted to remove the platform of the wear.

What is the difference?—It has been washed away and rebuilt. The fish cannot pass it now on account of the stones.

Did the fish formerly pass the wear?—Yes, they did formerly, when there was a gullet in the wear.

What was the kind of gullet left for the passage of the fish?—About six feet wide, and about two feet deep in the centre of the wear.

Was there generally a body of water in the gullet which would admit of the fish going up?—Yes.

What do you imagine was the height of the wear at the former time of which you speak, I mean the difference of level between the water below the wear and the water above the wear?—I should suppose fifteeen or sixteen feet, somewhere about that.

Was that in a slope?—Yes, it was in a slope; I measured it seventy feet down.

Do you mean the Committee to understand that while the wear was in its former state the fish could ascend by means of this slope, notwithstanding its being fifteen or sixteen feet high?—They went up very easy.

Are there people living at Totness who have seen fish go up?—Yes, they have.

How long is it since the wear existed in that state?—About forty years ago.

What led to an alteration in the wear?—It was washed away by a flood.

Did the river continue for some time without this wear in consequence of its being so washed away?—No, I fancy they rebuilt it immediately.

In what way was it rebuilt?—It was rebuilt with about half the former slope.

Was the height of the wear increased when it was rebuilt?—Yes.

Was any gullet left in the wear when it was rebuilt?—None at all.

Did

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Did the new wear, rebuilt about thirty-five years ago, prevent the fish getting up as they had done before?—Yes, nothing could pass it; nothing on earth.

Was the wear ever washed away again?—Yes.

About what time?—About three years ago.

Was it immediately rebuilt?—No.

What interval was there between its being washed away and its being rebuilt?—The best part of the winter, rather more.

Was the interval between its being washed away and being rebuilt the period during which the fish went up to spawn?—Yes.

Did a greater number go up during that interval than used to do so when the wear existed?—Nearly twenty times as many.

What proof had you that such was the case?—Every person who had never speared any before, speared 200 or 300.

Was there so much spearing as to prevent any advantage to the fish by the breeding of the salmon?—Yes.

Therefore the fishery derived no advantage in the subsequent year from the increased number going up to spawn?—Fish was a great deal more plentiful; they killed more fish at Totness than they had killed for seven years before.

Is the wear rebuilt again within the last three years?—Yes.

Is it rebuilt exactly as it was before it was washed away the last time?—No.

What is the difference?—The stones are promiscuously thrown in.

The wear is now as difficult to pass as it was before it was washed away the last time?—Yes.

Was its height raised during the last rebuilding?—Yes, it is rather deeper than it was, but not much.

There is no gullet left in this wear last erected?—Nothing; the stones are so coarse and so rough.

Have you ever had any communication with the proprietors of this wear, as conservator of the River Dart?—Yes.

What passed on the subject?—I told them when they rebuilt the last wear to rebuild it according to law; that is to say, to have a gullet, and let the fish have a passage.

Did you intimate that on behalf of the salmon fishery of which you are conservator?—Yes.

Did you do so in any form, or merely verbally?—Verbally; not in any form.

Was there a platform at the bottom of the wear before it was washed away?—Yes; it has been there ever since Martin's time, about 35 years ago.

Was that below the wear?—Yes.

So as to form a step at the bottom of the wear, which was calculated to prevent the salmon leaping?—Yes.

What height was the step?—About ten inches.

Do you apprehend that the platform was made for the purpose of preventing the fish getting up the river?—I have been informed so.

Do you think yourself that it will prevent the fish getting up?—Yes; nothing can pass it.

Does it serve any useful purpose, connected with the mills?—No.

It did not add strength to the foundation of the wear?—It is impossible for me to answer that question.

The Committee wish to know whether, after the wear was washed away the last time, within three days you made any intimation to the proprietor of the mill for the purpose of having a gullet left in the wear, when it should be erected?—Yes; they promised me it should.

You say that the proprietor of the mill promised there should be a gullet left, so as to enable the salmon to ascend?—Yes, that is the plan; and when I spoke to Hatckwell, he said the whole wear would be a gullet.

Has that promise been fulfilled?—No; they paid no attention to it.

Who made the promise?—The engineer and young Hatckwell, Thomas Hatckwell.

Did you make any observations upon the wear being erected contrary to this understanding, whilst it was in progress?—Yes, I did; they paid no attention at all to any thing that was said said.

You say that they promised there should be a gullet left?—Yes.

Did they acknowledge at any time that they were bound to leave such a gullet,

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as would enable the salmon to ascend?—No; they never said any thing to me about that.

Has any opinion ever been taken of counsel as to the illegality of the wear at Totness, before it was washed away the last time in 1820?—Yes, Mr. Chitty's.

Was a case laid before counsel for his opinion?—Yes.

Have you a copy of that case?—Yes, I have.

Can you produce the copy, with the opinion thereupon?—Yes.

[*The Witness delivered in the following Case and Opinion.*]

"About thirty years ago the wear which crossed the river Dart was washed away. The object of the wear is to conduct the water of the river to grist and fulling-mills belonging to the corporation of Totness, and salmon could pass and repass at all times whenever there was any water running over the wear. The ancient wear had an escape, usually called the gullet, therein. Prior to the ancient wear being washed away its form was thus:

This wear was wholly built or composed of stone-work, from *a* the natural stream *above* the wear, to *b* the natural stream *below* the wear. Salmon could then pass and repass with the utmost freedom, and were very plenty, and cheap; but after the breach before mentioned the corporation of Totness, to whom the wear belongs, repaired such breach, not by restoring the wear to its ancient form, with the escape in the centre, but by narrowing the stone-work to about one half of its former depth, and carrying out an horizontal *wooden platform* at the bottom of it, about twelve feet, and about four feet from the surface of the water.

The effect of this platform is, that it entirely prevents the salmon from going up the river to spawn; and the fisheries, which are numerous on this river, are nearly ruined in consequence, and the ancient gullet or escape is omitted from the present one. This platform was erected for the express purpose of stopping and catching all the salmon at the foot of this wear, at all seasons of the year, and a few were allowed to escape by being put above the wear, that were unseasonable and not fit to eat; and were it not for the very few fish that are allowed *thus* to escape, and the still fewer that happen to get over the present wear in extraordinary times of flood, when a very high tide and great flood happen to unite, which is a very rare occurrence, and when it takes place continues only for a few minutes, there could not be a single fish in this river. This platform operates as an impenetrable barrier to the passage of the fish, which it is needless to mention must attain the sand beds of the river in order to deposit their pea, which otherwise are abortive. It was melancholy to see the millions of salmon pea which strewed the shores of the Dart in the last season, which were shed by the fish *below* the wear, and therefore came to nothing, because they could not get up over this destructive platform to deposit their pea, which nature requires that they should. This is the finest river in the county of Devon, perhaps in the kingdom, for the production of salmon, and on which there are a great many prescriptive rights of fishery, all of which are much injured, and some of which are entirely ruined by this platform. The form of the present wear and platform is thus:

a The river above the wear.

b The present wear, composed of stone work down to *a*.

c Where there is a step about eight inches high from the platform to the stone-work, and is the most prejudicial feature in this case, for the natural motion of the salmon being from left to right and right, to left, and not up and down, as soon therefore as they bring their noses against the step, (after having leapt from the bed of the river from *c* to *i*, which very few have strength to do, but are for the most part dashed back upon the rocks and stakes beneath by the force of the stream, for want of depth of water on the platform to take a second spring) their broadside is presented to the water, and they are immediately washed back.

d The wooden platform, which extends about twelve feet horizontally from the step, and at low water is about four or five feet from the surface of the water at *c*, which is the bed of the natural river below the wear.

f The dots show the gradual slope of the old wear immediately compared with the present.

Thus the unquestionable fact is, and which can be proved beyond dispute, that the fish could at all times go up over the old wear, and that the present is impassable; that in the old wear there was an escape, in the present there is none. When the old wear existed with all the contrivance of hutches, illegal meshes to the nets, and the constant use of the spear, with the uniform destruction of the fish *throughout* the year, even then salmon were plenty and cheap, from 1 *d.* to 2 *d.* per pound; but since the platform to the new wear was erected, a contrivance more ignorant, baneful and impolitic, than any other thing, the fish have diminished almost to nothing.

A conservator has been regularly appointed by the Session, under the Act 58 Geo. 3, c. 43. There seems to be no distinction between this case and that of Weld *v.* Hornby, clerk, 7 East's Rep. 195, except that there the nuisance had not existed twenty years, and here it has existed thirty-five years at the least; but Lord Ellenborough there distinguished between public and private nuisances as legalized by length of time, and by 17 Rich. 2, c. 9, the making new wears, and the straitening them, was declared a public nuisance.

The question then is, whether this new erection, that is, the platform, be or be not a public nuisance, as destructive of the fisheries upon this river, and abateable by the conservator,

servator, as the corporation refuse to alter or remove the platform, or restore it to its ancient form, so that the fish may be able to pass and repass; on which your opinion is desired for the assistance of the magistrates, who will order the conservator to act as you may think they are justified in doing."

Mr. William Norman.

3 May, 1825.

OPINION ON THE FOREGOING CASE.

I am of opinion that the above-mentioned alteration in the wear, constituting so material an obstruction to the watercourse, and fish, is a public nuisance, and that any person, notwithstanding the elapse of time, may legally abate the same, or proceed by indictment. As the nuisance has been so long permitted to continue, it will certainly be most prudent to indict the parties who cause this wear to be continued.

Inner Temple, 30th Sept. 1820. *J. Chitty.*

Can you produce the plan to which the case now delivered in refers?—Yes.

Will you send the plan to the Committee?—Yes.

The Committee observe, that Mr. Chitty considered that the wear as existing at that time was a public nuisance, and might be abated by indictment, was any proceeding taken in consequence of this opinion?—Yes.

What?—After the opinion, I went to Exeter to take the opinion of the Court, whether it was lawful for me to remove the wear agreeably to what was said. They said I should do my duty. I had a written document from the magistrates and from the Court. I then went and gave the corporation notice to remove the wear within fourteen days, or I should proceed to remove the platform. After a good while, they did something, and nailed down sticks to form a gullet.

Were the sticks laid down for forming the gullet in the platform?—They took away about twenty feet of the platform, and paved it up.

They took away the step?—Yes.

Did they proceed to make a gullet such as was sufficient for the salmon to ascend throughout the whole wear?—No, by nailing down boards about twelve inches high.

They made an artificial gullet of wood on the top of the wear?—Yes.

Over which no water came?—No.

Then you consider this as a mere evasion of the law which they were bound to follow?—Yes; I do. When they built the wear, instead of bringing it down in a slope of seventy feet, they built it not half that; then the wear was washed away again directly.

The weir has been washed away since that opinion was given?—Yes.

You have before stated, that it has been rebuilt in as bad a way as formerly; do you consider that Mr. Chitty's opinion applies to the present state of the wear, as much as to the former state of the wear?—Yes; I should think it does, excepting as to the platform.

Have you taken any proceedings in reference to this wear, under the opinion of Mr. Chitty, since it was last rebuilt?—No.

For what reason?—The expense.

To whom does the salmon fishery between Totness and the old river belong?—Part to the Duke of Somerset and part to the Bolton interest.

By whom are the fish taken in the hutches at the mill?—By the corporation of Totness; and they have no other fishery.

Do you consider that the fish that are taken at the mills is a deduction from the value of the fishery on the river between Totness and the wear, which belongs to another party?—Yes; it takes every fish; nothing can pass it.

Describe the nature of the hutches which exist near the mills, and in the mill-stream, for the purpose of taking salmon?—They are wooden bars and wooden gratings; the bars of the hutches are one inch and two-tenths wide; the gratings are something wider; they may be two inches wide.

For what period have hutches existed in the mill-streams, as far as you know, for the purpose of taking salmon?—Ever since I have been a boy.

Is it considered that these hutches are legal?—No.

Has any proceeding ever been taken to show their illegality, or to remove them?—I prosecuted the upper hutches nearest the wear two years ago, and seized them.

Has it since been erected?—Yes.

Was any proceeding commenced against you for having taken down the hutch?—No; not then, nor since.

Do you mean the corporation of Totness submitted to the removal of the hutch by you?—Yes.

And

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And it has not been since erected?—Yes; it was erected the next season, and I prosecuted them again last year.

What was the result of the prosecution?—They were convicted in the penalty of 10 *l.* each before the magistrates.

Did they pay that?—They appealed against the conviction; and when they appealed against the conviction, instead of giving notice at the clerk of the peace's office, they left it at his house in St. Thomas's; when my solicitor brought on the trial to defend it, it was past in a moment, because it was informal; they afterwards paid the money.

In what manner did you recover the penalty after the failure?—By seizing and selling the goods and chattels of Sawyer and Hamling; they were the renters.

Therefore you succeeded in removing the upper hutch, and recovered a penalty?—Yes.

For what reason did you not proceed in the same way respecting the lower hutch?—The case would have come before the corporation as magistrates, being within the borough, and they being proprietors, I thought I might not succeed.

This impression was the ground upon which you did not proceed in relation to the lower hutch as you had done as to the upper?—Yes; it was.

But you consider that there was no difference between them in respect of their being equally objectionable, and injurious to the salmon fishery?—No doubt in the world; they are both alike.

Do you apprehend, that if there was a grating laid across at each extremity of the mill-stream, so as to admit the water without admitting the fish, that it would be any injury to the mill-stream as to the quantity of water?—No; none in the world.

Should you consider, that if the fish were prevented from going into the mill-stream in ascending and descending, and if a gullet were constructed in the wear by which the fish could ascend with freedom, that the interests of the salmon-fishery, in so far as respects the mills and the wear, would be sufficiently provided for?—Yes, I do.

Do you consider that such a regulation would be an injury to the mills?—No, none.

Would it increase the expense of repairing the wear?—Yes.

Can you estimate the expense?—No.

Would it have been more expensive to construct the wear properly, with a view to the salmon fishery, than it was to construct it as it now exists?—No; it could be easily built in that form.

And, in point of fact, you called upon the proprietors of the mills so to build it before it was rebuilt?—Yes, I did.

And they consented so to do, but neglected to perform their promise?—Yes; and there were plans.

By whom were the plans furnished?—I do not know by whom.

Do you know where the plan now is?—No, I do not.

Is there any obstructions to the free passage of the salmon higher up the river Dart?—Yes.

Can you state how many?—There is one in Buckfast Abbey.

Is that so constructed that the fish can pass it?—They cannot pass it now.

Could they ever pass the wear?—Yes, they could, by the side of the wear; it was broke away, and when there was any kind of flood they went round the wear.

Is that as high a wear as the one you have described at Totness?—No.

What height is it?—Ten feet high.

Do you consider that a gullet could be constructed in that wear such as to admit of the passage of the fish, and without being injurious to the mills?—Yes.

Is there any taking of salmon by hutches connected with the upper wear?—No.

Are there any Salmon taken at the wear which you have mentioned at Buckfast Abbey?—No.

Therefore, it is merely maintained for the purpose of mills?—Yes.

Do you consider that if a free passage was secured to the salmon ascending for the purpose of spawning, that the decrease of the fish in the Dart of which you have spoken would cease?—Yes, no doubt of it; it would increase by some thousands—millions.

You consider, therefore, that the great cause of the decrease in the river is the existence of the obstructions to which your evidence has related?—Yes; that and the spearing.

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Can you explain the manner in which the destruction by spearing is carried on in the upper parts of the Dart?—Yes, I can; about the middle of September the spearers clear out the resting places, and take away the great stones, and ruffle up the sand, and then put in a dozen white stones about the size of eggs, placing them in a kind of circle. When the salmon come in they work at these places; they then wait perhaps from four o'clock in the evening in the winter time to ten or eleven at night. In the night-time they generally come in. When the stones in the night are covered they are sure the fish are there, and they spear at them in the darkest night. When there is high water, or a kind of flood, they can see them at the bottom by the white stones being covered, and they also work as soon as ever they come into these places. When you cannot see the bottom of the river you can see the stones covered, and they then spear them with a ten-toed spear.

In what state are the fish at the time they are speared in this manner?—In the act of spawning, all of them.

Have you ever attempted to repress this practice of spearing?—I have prosecuted twenty or thirty, and put them to prison.

Have your prosecutions not been effectual to put a stop to this practice?—No; the penalties are not sufficient.

What are the penalties at present which you have been enabled to enforce?—10*l.* and 5*l.*

Have you, in point of fact, recovered from many persons penalties of 5*l.* and 10*l.* for spearing?—Yes; but principally they go to prison.

For what period have they gone to prison?—Two months to the tread-mill.

In what way do you account for persons being disposed to pay penalties of that amount, and to go to the tread-mill for the sake of spearing fish which are uneatable?—They sell them; they generally fetch 6*d.* a pound in their bad state. They spear many scores.

Are there not a great many of these salmon spearers combined together to pay penalties for each other in the neighbourhood of Totness?—Yes.

What are the fence months of the Dart?—From the 15th November to the 15th February.

What are they in the Avon?—That is a week or two longer.

Are those the best months, or would you suggest any alteration?—They are the months in which the fish that are killed ought to be let up to breed.

What period should you consider would be the best and most effectual to promote the breed of salmon as fence months?—From the latter end or middle of September till the 1st of April.

Do you consider that it would very much promote the breed of salmon that the fence months should endure for the period you have stated?—I do.

Do you think that persons who may derive at present some advantage from a shorter close time, would be compensated for any increase of it by the multiplication of salmon that would arise from the extension of the close time?—They would gain by it; there would be 500 salmon to one, perhaps 5,000.

When the gullet existed in the wear there was a much larger quantity of salmon than after the wear was rebuilt?—Yes.

The cause of that is, that they were enabled to ascend and spawn in the upper parts of the river?—Yes.

Since you have known this fishery on the Dart below the wear, they have annually decreased in the quantity of salmon taken, and the value?—Every year.

Do you happen to know, whether fish are out of season at different times on the Taw and the Torridge?—I think they are all out of season at one time.

Do you know any thing of the Exe river?—Yes; I have known it from a child.

At what periods are fish in season and out of season on the Exe?—All at the same time.

Do you know it from experience, or is it a matter of opinion?—I know it by seeing the fish caught.

Have you seen fish taken in the Exe out of season?—Yes; I have.

In what months?—In the winter months.

How early have you known the fish out of season on the Exe?—In November and December.

Have you known them out of season in October?—I cannot say I have.

How late have you known them out of season?—In December, January and February.

Have

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Have you known them out of season on the Dart as late as March?—Yes; I have.

At what time do the salmon fry come down the river, on the Dart?—About March April and May; sometimes as late as June.

Do you consider that salmon fry come down all rivers at a period nearly the same, after the period of spawning?—Yes, nearly the same; it depends upon the distance. Some who have got twenty or thirty miles to come down the river, cannot come down so soon as those who have spawned fifteen miles farther down.

You have stated, that you have some knowledge also of the river Avon?—I am the conservator of it.

Are they not in the habit of fishing in that river much later than in the river Dart?—Yes, they are.

Do you consider they ought to be later, or that there should be any difference between the season of that river or any of the other rivers?—No; I consider they ought to be the same. I have seen the fish brought from there to Totness market with their bellies sewed up, they were so full of spawn.

Do you know any reason why their fishery is so much later delayed than that of the other rivers?—The reason I think is, that the fish do not come into the river until they want nearly to spawn, that is to say, till the latter end of the year; fish do not ascend many of the rivers till they actually want to spawn, and then they come in in great abundance. I sent a man, who saw thirty pulled at a haul.

Can you account for the salmon entering that river always so much later than they do other rivers?—Yes, I can; they do not come in till they nearly want to spawn.

When do the salmon come into the Avon?—In June July and August.

When do they come into the Dart?—In May mostly, but they have caught very few this year.

Is there in the Avon, early in the season, sufficient water to bring in the fish?—No, there is not.

And do you attribute to that cause their lateness in coming?—Yes.

Do you consider, therefore, that the difference between the Dart and the Avon depends upon what you have stated, not upon any difference as to the condition of the fish?—None in the world.

Do you consider that the fish in the two rivers are ready to spawn about the same period of the year?—Yes, they are.

Should you consider it beneficial to the salmon fishery if the fence months were generally the same?—Yes, I should think so.

In what way should you consider that arrangement would be productive of advantage?—By giving time for plenty of breeding-fish to be in the river, and preventing the spearing.

Do you consider that it would be important, to prevent illegal fishing, that persons selling salmon out of season should be liable to a penalty, and that the season during which they are so liable to a penalty should be one and the same?—Certainly. If one river was allowed to fish longer than another, the fish would be killed in this river and sold for the fish of that.

Do you consider that an uniform close time would therefore tend to make the law effectual?—Certainly.

You also know of the river Harborn, a branch of the Dart?—Yes, I do.

Are there any wears or hutches upon that river that obstruct the fish?—Almost every mill has a hutch. There are four.

At what distance?—About two miles and a half and three miles.

Are the fish by these hutches prevented going up to spawn?—The hutch does not prevent them, but the wear.

Do you know of many fish being caught on the river illegally?—Yes, more than two hundred are supposed to have been killed by the spear this year. They killed thirty-nine, they say, in one week, very large fish indeed. It is a very shallow river. They spear them with lanterns; they have a reflecting lantern; they hold out the light, and the fish come directly to it.

Can they spear them effectually in that river without light?—Not very well.

Or in any river?—Yes, they can on the Dart. I have prosecuted twenty or thirty there.

I think you stated, with respect to Totness wear, that if this gullet was in the middle of the wear as formerly, there would be no difficulty of the fish getting up?—No.

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Would the gullet enable the fish to return after spawning?—No; the water is ten feet deep above and will not rise; it is like getting over a wall.

How would you propose they should return?—Through an escape by the side of the wear.

Suppose gratings were laid down at the head of the mill-leaps, would it be easy for the proprietors of the mills to keep them clear?—Yes; very easy.

I think you have stated they would have plenty of water, even in the summer time, for the mills, if gratings were laid down?—Yes.

Did you formerly know of a hutch called Seymour hutch?—Yes, I know the place, and the posts are there now.

Was that legal or illegal?—Illegal, and was destroyed. I cannot say whether it was destroyed by a process of law or no, but I have heard that it was.

Are there on the river Avon hutches and wears equally destructive of the fish as on the Dart?—Yes; there are.

Captain Bastard, a Member of the Committee; Examined.

Captain Bastard M. P.

ARE you the proprietor of salmon fisheries on the river Dart?—I am.

Are they below or above the Totness wear?—About two miles and a half below the wear.

Have they increased or decreased within your recollection?—Since the year 1794, a right of fishery which then returned nearly 100 *l.* a year, does not at this moment produce me 5 *l.* a year, and therefore I conceive the quantity of salmon has very considerably decreased.

Have you formed any opinion as to the cause of this decrease?—I conceive it is owing to the destruction in the rivers by spearing, and the obstruction of the wears to the fish going up to spawn, besides the difficulty attending the prosecution of people for illegally fishing and poaching.

Having heard the evidence of Norman, the conservator of the Dart, are you disposed to think that his opinions upon the same subject are well founded?—Certainly; he has taken much pains to make himself acquainted with the subject, and has met with a great deal of difficulty in attending to his duty as conservator, from the present state of the law.

Should you consider it likely that the salmon fisheries on the Dart might be restored to their former state, if arrangements were made by which the spawning-fish could ascend to and be protected in the upper parts of the river?—Certainly. I have heard that about four years ago, on the river Tyne, the wears were washed away, (I believe remained in that state for upwards of a year or more,) and I have heard that the quantity of salmon increased very considerably after that on the river till the wears were re-erected. I should also wish to state to the Committee that when the wear was rebuilt on the Dart, about three years ago, I expressed a wish to the present proprietors of the wear, in rebuilding it they should have a gullet exactly as Norman has described, and which I was not aware till now existed in the old wear forty years ago. The proprietors then assured me that proper precautions should be taken to enable the fish to get up, which, however, has not been done.

Do you not apprehend that the rights of the parties possessing the wear must now be the same as those which existed at the time of the old wear, in which there was a gullet?—Certainly.

Consequently that there can be no ground, in point of right, in them to prevent a recurrence to a wear so constructed as that the fish should be enabled to ascend?—Certainly not; there is no right whatever to alter the construction, I conceive.

Jovis, 5° die Maii, 1825.

THOMAS FRANCIS KENNEDY, ESQUIRE,

IN THE CHAIR.

Murdoch Mackenzie, Esq. again called in; and further Examined.

M. Mackenzie, Esq.

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THE Committee understand that you wish to explain some part of the evidence you gave last day?—Yes; I stated, that I thought that from the 1st of August to the 1st of January would be a proper close time for the rivers I occupy. During

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the last three or four years I have had from ten to sixteen conservators upon those rivers yearly, and they and I are of opinion, that early in the month of October all the breeding fish have passed up, and that before the end of November the spawning is over. I consider any extension of the close time at that period therefore as being of very little importance, one week in August being of more service in regard to the increase of fish than three months in winter, because all the fish that go up in August are breeders, and heavy in spawn; and all those that come in in winter are clean fish, with small roes, which would be killed at the upper fisheries after the fishing commenced. In all the rivers I occupy salmon grow scarce, and go out of season in August; they then become heavy in spawn; so that if we kill them up to the 15th of September there would be scarcely any breeding fish left; it would be virtually a shortening of the present close time by three weeks instead of extending it; and all the fish we could bring to market would be of a bad description in the beginning of the season, on account of having lain in the rivers since January, and in the end of it from being all heavy in spawn. The rivers which salmon enter early require a different close time from other rivers which they don't enter till late in the season. The more I consider it the less I can see the possibility of making one close time to the whole; it would be like making one rotation of crops for all the lands in the kingdom: it might be of use to some rivers, but it would destroy others entirely. If the commencement of the fishing was fixed for the 1st of March, in some of my rivers in particular, all the February fish would be lost: I could therefore have no inducement in nursing those rivers; and even if they were converted into nurseries of fish entirely for stake nets, all the poachers in the country would flock to them; they would go in gangs, with their faces blackened, as I have known them to do, so that there would not be a fish in the rivers left; they would be all carried away by hang-nets or thief-nets, as they call them. It would require as many conservators as there are pools in the rivers, and even those conservators would not do their duty.

You have said in your former examination that you were yourself a fisher by stake nets in the Dornoch frith, but that you are not so now; when did you cease to have stake nets?—I think it was about the year 1816.

At what time did you acquire the fisheries which you hold in the river Shinn?—I believe it was in the year 1810.

Were there not stake nets at one time at places called Creich, and Spinningdale, upon the north coast of the Dornoch frith, and at a place called Ardchrony Point, on the south side of the said frith?—There were.

To whom did those stake nets belong?—To different proprietors.

Can you name them?—Mr. Dempster of Skibo, and Sir Charles Ross of Balnagowan.

Were those stake nets destroyed by some of the people in the country in the year 1816?—There were some injuries done to them; I cannot say in what particular year; I don't recollect.

Do you know at what time of the year it happened?—I suppose it was when they were up; I cannot specify exactly the time.

Suppose it was when they were up, what inference could you draw from that as to the season; when were they up?—They were not always put up at the same time; it depended upon the weather; it was some time in the spring, and they continued till the 26th of August.

Therefore it must have been between the spring and the 26th of August?—Yes.

Were those nets not put up and again destroyed oftener than once?—I cannot charge my memory particularly upon that subject; I have no particular recollection about the periods.

Have you any distinct recollection as to the fact whether those nets were after the first destruction restored, and then destroyed and restored again; were they not more than once destroyed?—I have no recollection, except a partial injury being done to them.

Did that take place more than once; endeavour to recollect yourself, as it is material that the Committee should have a distinct statement of that fact?—I have some ideas upon my mind, although not precise ones. I have a vague idea that there was some partial injury done more than once; one of those stake nets at Ardchrony was carried out from the shore to the channel, where the frith is nearly three quarters of a mile wide. The channel I suppose there would be between fifty and sixty yards at low water. On the opposite side, in Sutherland, there was another stake net marked out, so that nothing would be free but this channel, and it

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was intended, I understood, to fish even that channel with a running net, by which means the whole passage would be shut up. My fishers in the upper fishings had to come down every week in a coble, or small fishing boat, to the boil-house with any fish they might have, and they generally returned with the night tide. On one night they were thrown upon this immensely large stake net and very nearly drowned; it was with the greatest difficulty they escaped, all wet, and I desired them to cut down the stakes for a passage to themselves, but not to injure the nets. The men made affidavit afterwards that they were in danger of their lives, and the obstruction was so great that even the boatmen in the frith refused to go out in the night time.

The question which the Committee wish to have an answer to is this, how often was this destruction of stake nets allowed to take place?—I believe it was once or twice, but I cannot be more precise at this moment.

Will you state as nearly as you can recollect the dates at which that destruction which you mention as having once or twice taken place?—I cannot recollect at all as to dates; I cannot charge my memory with dates.

Have you no cause of recollection whatever as to dates?—No, I cannot charge my memory as to dates; if I had been aware of this, I might have been prepared with memoranda.

Were the persons by whom the destruction you stated took place, and by whom it was made, armed with hatchets and fire arms; the Committee mean any destruction as to which we have been asking information from you?—The stake nets I alluded to as entirely obstructing the navigation of the frith were of course cut down with hatchets.

Were the persons who did so armed with fire arms?—I have no recollection as to fire arms; there is a vague idea in my mind that one person had a gun, but whether for shooting seals, or not, I cannot say.

What was the greatest number of persons employed at any one time in effecting the destruction of those stake nets?—I cannot charge my memory with that.

Were those persons, or any of them, your servants or dependants?—I suppose they were my fishers, in the instance I have stated.

Do you know that they were so?—I cannot, at this distance of time, say who they were.

Do you mean to say, that if persons were sent there by your orders to destroy those stake nets, you don't know who they were?—I believe, I suppose, they were my fishers.

And therefore your servants?—Of course.

In point of fact, those persons acted under your orders or instigation?—They were desired to cut the stakes in the manner I have stated, in order to effect a passage. I considered the total obstruction of the frith just the same as if they had run a barrier across the highway.

Do you wish the Committee to understand, that whatever was done to remove the obstruction which you have stated, was done by your orders?—To remove that obstruction, certainly.

Did you ever give any written order or instruction regarding the destruction of those stake nets, or any of them?—It is possible that I may have given a line to one of them, to remove the obstruction.

Do you mean that line was a legal authority, or a mere private instruction?—It was merely a private instruction.

Was not such destruction of those nets an illegal act?—I could not consider it illegal at any time to remove so great an obstruction, that nearly shut up the whole frith; and I considered it less so after the decision of the court of appeal in the Tay case.

Then do you consider that you are authorized to take the law into your own hands, and to carry it into effect as you did?—If the obstruction were a dangerous one to the lives of my fishers, I think I might do so, if the legal authorities of the country would not remove the obstruction.

Then do you therefore consider that you were a better judge of the illegality of those stake nets than the legal authorities that you say would not remove them?—I don't pretend to be a better judge than the legal authorities, but the legal authorities may be sometimes disinclined to do their duty.

Do you think that if the legal authority be disinclined to do its duty, any individual has a right to proceed to carry the law into effect without any authority?—

M. Muckenzie, Esq.

5 May, 1825.

[*The witness was hesitating as to his answer to this question, and an objection was then taken to it by a Member of the Committee, upon which the witness was ordered to withdraw, and the room cleared.*]

[*On strangers being re-admitted, the witness was informed by the Chairman that he need not answer questions that tended to criminate himself. The question was then read to the witness.*]

Witness: I think if any person threw an obstruction across a highway, any individual might break it down without applying to a legal authority.

Do you consider that stake nets for the purpose of taking salmon are obviously equally illegal with an obstruction thrown across a highway?—If it endangers the lives of individuals, certainly; and the one in question was calculated to do so.

Is it a fact that you were prosecuted at the instance of the proprietors of these stake nets, as a person who had ordered the violent destruction of their property?—I was, and I was fined by the Court for it, as having no right to take the law into my own hands, and I suppose the same thing would be done in the case of an obstruction across the highway. I will not, therefore, take the law upon the most trifling matters again into my own hands, let the obstruction and the inconvenience to the public be ever so great, or the matter ever so trifling.

It is a fact that there was the verdict of a jury against you in that case?—I believe so.

Veneris, 6° die Maii, 1825.

THOMAS FRANCIS KENNEDY, ESQUIRE,

IN THE CHAIR.

Murdoch Mackenzie, Esq. again called in; and further examined.

M. Mackenzie, Esq.

6 May, 1825.

WILL the witness be so good as state whether this paper be a correct copy of the issues which went before the jury, in a case in which he was defendant?—[*Handing a printed paper to the witness.*]—[*Witness looking it over.*]—At this distance of time I cannot say if they be the exact issues, but it is probable that they may be so.

[*The paper produced was as follows:*]

"Jury Court, May 27, 1818.

AMENDED ISSUES.

James Grubb *against* Murdo Mackenzie, Esq. of Ardross.

Joseph Gordon, W.S. Pursuer's Agent.
James Pedie, W.S. Defender's Agent.
Mr. Bruce, Clerk.

27th May 1818.—The Lord Ordinary having advised with the Lords of the First Division approves of the amended issue, and appoints the pursuer to print the same, in order that copies thereof may be furnished by him to the clerk of the Jury Court; and appoints the clerk of the process to transcribe the amended issues *quam primum*, upon paper or parchment, and to transmit the issues so transcribed, together with the process, to the clerk of the Jury Court. (signed) *D. Cathcart.*

AMENDED ISSUES,

In the conjoined causes in which James Grubb, Tacksman of the Salmon Fishings of Ardchronie, Ross Shire, and the said James Grubb and Charles Matheson, joint Tacksmen of the Salmon Fishings of Creich, and others, in the County of Sutherland, are Pursuers, and Murdo Mackenzie, Esq. of Ardross, is Defender.

In obedience to a remit from Lord Alloway, Ordinary, dated the 18th June 1817, I report that the following issues are calculated to try the question between the parties:

1. Whether, in the night between the 9th and 10th days of April, in the year 1816, or about that time, nets and ropes belonging to the pursuers, and which were placed by them, or by their order, on stakes belonging to them, for the purpose of catching salmon and other fish, at Creich and Spinningdale, on the north coast of the firth of Dornoch, and at Ardchronie, on the south side of said firth, were destroyed and cut to pieces by the defender, or

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or by persons acting under the orders of the defender, or secretly instigated by him, to the great loss and damage of the pursuers, by the injury done to their fishing apparatus, caused by the aforesaid acts?

2. Whether, the pursuers having repaired and replaced the stakes, nets and ropes as aforesaid, and again erected the apparatus for stake net fishing at Ardchronie aforesaid, the defender, either by himself, or by persons acting under his order, or by his instigation, did on the 2d of May 1816, or about that time, again beat down, cut, spoil and destroy, the said apparatus for stake net fishing, or a part thereof, to the great loss and damage of the pursuers, by the injury done to their fishing apparatus, caused by the aforesaid acts?

3. Whether, the stake nets, ropes, or part thereof, being again erected by the said pursuers at Ardchronie aforesaid, the same were, on the evening of the 6th of July 1816, or about that time, again cut down, demolished, and destroyed by the defender, or by persons acting by his orders, or at his instigation, to the great loss and damage of the pursuers, by the injury done to their fishing apparatus, caused by the aforesaid acts?

4. Whether the stakes, nets and ropes, or part of them, being again set up as aforesaid, at Spinningdale aforesaid, were, on the day of the 10th of July 1816, or about that time, again cut and destroyed as aforesaid by the defender, or persons acting under his order, or by his instigation, to the great loss and damage of the pursuers, by the injury done to their fishing apparatus, caused by the aforesaid acts?

(signed) *J. Osburn Brown,*
Second Clerk of the Jury Court.

Damages in both summonses laid at - - - - £. 5,000."

You have said in a former part of your examination that stake nets catch the fish, which if not caught might find their way to the rivers, and be there taken; did you not say so?—I believe I did.

Was it for that reason that you proceeded to remove the stake nets as to which you have been examined?—I removed no stake nets, nor did I order any to be removed, except when an attempt was made to stop up the frith entirely, and the lives of my fishers were endangered in the way I have stated; there was not a particle of evidence that I ordered any stake nets to be molested.

Is it not the fact, that the coble or draft nets in the river catch fish, which if not caught by those nets might go farther up the river and be there taken?—I suppose that all fish that are not taken by nets would go up the river.

Do you not consider that coble nets take fish in one part of the river, which if not taken would ascend to the higher part of the river?—Of course the fish are always pushing up the river.

In point of fact, are you not daily catching fish, which if you do not catch at the place you do would go up to a higher station, and be there in all probability taken?—I consider that to be answered in my answer to the question before last.

You have stated that you fish by cruives in some of your rivers; do not those cruives extend from one side of the river to the other?—They do.

Then where those cruives are placed no fish can go up the river without them?—The hecks of our cruives are three inches wide, which would admit of a salmon of ten pounds weight passing through them; all the small fish pass.

What is the width of the meshes of the stake net; state the different widths?—I suppose about two inches from knot to knot, upon the square.

Do you therefore consider that the cruives would admit fish to pass which the stake net would not admit?—Most certainly they would.

But will not the fish as easily pass a mesh of two inches from knot to knot, which stretches, as go through a heck made of wood, which is three inches in width?—I cannot say exactly, not having made the experiment; but I should think not; I am certain they would not; besides, the nets on the stakes are always stretched.

Are your cruives shut through the whole week, or do you observe the Saturday's slap?—We do not regularly observe the Saturday's slap. We sometimes open the hecks, but not regularly, to allow the fish to go up.

In point of fact, you do not consider it indispensable to comply with that provision?—In all cruives where the Saturday's slap is observed, I suppose it is for allowing the fish to go up to the upper heritors, for where there are no upper heritors they would be all killed by poachers above, unless there be conservators upon the river; and I possess all the upper parts of the river.

Are not stake nets frequently now placed upon the open sea coast?—I have seen some there.

The stakes of such nets are driven into the beach, and the nets extended on those

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stakes, are they not?—The stakes are extended out upon the ground as far as the ebb of the tide will admit, and the nets are fixed to them.

Then the stake nets cannot extend farther into the sea than the low-water mark, for below the low-water mark the stakes cannot be placed?—I conceive it is possible that they can be placed farther than the low-water mark; much depends upon the ground.

Do you consider that if they be extended below the low-water mark, they are more objectionable than if confined to that limit?—I consider them objectionable in all parts; they are nearly equally objectionable in all parts. A stake net can do more injury to a river in some parts, where not extended far, than they could do in others, even if they were extended beyond the flood mark.

Stake nets never can extend across the estuary, can they?—Stake nets may be brought to meet opposite to each other in an estuary where the channel is very narrow, and that channel may be fished with a running net.

But the Committee think that you stated, in point of fact, that stake nets, without a running net, cannot actually extend across the channel of the estuary?—It depends upon the depth of the channel.

Stake nets alone cannot shut up the estuary, and so catch all the fish like cruives upon the river, can they?—I think a stake net might be made to extend across a river or channel, and catch the fish if the channel be shallow.

But in point of fact, you have not known stake nets stretched across the river or estuary?—I have not seen them so stretched.

Is it not common in most rivers to run a coble or draft net, by sweeping it from one side to the other?—That is the common practice with coble nets in rivers.

Then the coble net, in its operation, frequently extends from bank to bank?—It does often; but that depends upon the breadth of the channel.

Do you know a place called the Kyle in the Dornoch frith?—I do.

Where is it situated?—Above Bonar Bridge. I am tacksman of the whole Kyle fishings there.

Is it in point of fact the lower part of the river Oykell?—That depends upon opinion.

Is it a river into which the Oykell and other rivers run?—It is sometimes called the Kyle, and sometimes the Oykell.

Do you know of any nets being used in the Kyle across the channel of the river from bank to bank?—I have already stated that the coble nets extend from bank to bank.

Is there any net in that fishery fixed, and not a running net, such as you have described the coble net to be?—There is no fixed net that I know of there from bank to bank.

Is there no floating net between bank and bank?—All coble nets are floating nets.

But do you say that there is no net that is a greater obstruction to the river than the common moveable net?—I think that the common moveable nets in constant succession are the greatest obstruction that can be in waters of that sort.

Have there been any proceedings at law regarding any nets used in the river Oykell?—There are proceedings at law now regarding a net belonging to Mr. Monro of Novar, a still net, the legality of which is now challenged.

The Committee thought you stated that the fisheries in the river Oykell were in your possession?—So they are all.

Has Mr. Munro of Novar also a fishery on that river?—He has a fishery upon the Oykell or Kyle, of which I am tenant.

Is the net, as to which proceedings at law have been commenced, your net as Mr. Monro's tenant?—It is.

Then is the proceeding at law instituted against you, or against Mr. Monro?—Mr. Monro is now upon the Continent, and his factor would not go into a law suit upon the subject in his absence; and the proceedings are against me as being in possession of the fishery.

Did you place that net there, or was such net previously used by Mr. Monro, or his tenant?—It has been used, I understand, beyond the memory of man; and it is now used strictly according to the established usage.

Be so good as describe the net regarding which proceedings at law have been instituted, and which you said you conceived to be in strict conformity to established usage?—The present net is the common stell net.

Describe the still net, the position and way in which it is worked?—It is carried

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out in a sloping direction a certain distance in the water, and when fish are seen to come into it, it is hauled ashore. *M. Mackenzie Esq.*

What proportion of the whole breadth of the river does it extend to when at its full stretch?—According to the established usage, a boat, with its oars spread on the water, should have room to pass between it and the opposite shore; that space is always kept open; the water is very narrow at that part. 6 May, 1825.

What is the size of the mesh of this net?—I cannot exactly say; I suppose it will be about an inch and three quarters from knot to knot upon the square, or an inch and half.

During what part of the year is this net continued at that place?—During the fishing season.

At what time does the fishing season commence generally?—Whenever we think there are fish going after the 30th of November.

Are salmon fry ever taken in this net?—I never saw any. A few years ago there was a bar or stent, a net formerly often used in fishings in rivers, but which has been in some parts declared illegal in the court of session, and it was against that net that the legal proceedings commenced, and it has been discontinued because doubtful.

At whose instance were those proceedings instituted?—At Lady Ashburton's.

In that river?—In the Oykel or Kyle.

Are you acquainted with any cruives erected, or being considerably altered from their former state in any of the rivers you have spoken of; if so, mention the places in which those cruives are placed?—There are no cruives at present in that quarter except in the river Shinn. I erected a cruive upon the river Carron two years ago, and it was swept away during last winter.

Was it erected on any principle similar to those established; the cruive you erected upon the Carron?—It was upon the common principles.

But it has since been swept away?—Entirely. I have this year endeavoured: put a temporary cruive across there, but it has also been swept away. All the fish, or nearly all of them, that go up that river, are killed by poachers; that country being full of smugglers and poachers.

If fisheries exist in a river above the cruives which extend from the bank, must not the value of those fisheries be considerably diminished by such cruives?—If they were close cruives they would, but all the upper heritors can now enforce the regulation of the Saturday's slap, and to have the hecks of a legal width, viz. three inches.

Is there, within your knowledge, any interruption given to persons going to see whether such Saturday's slap be observed or not?—I don't know of any; I am not aware of any. In the river Carron I know particularly every facility is given to the upper heritors to see that the cruives are properly regulated.

Is there any mode of fishing now in use at places where stake nets were formerly in the friths with which you are acquainted?—There is not; we conceive that we get all the fish that would be caught there in the rivers.

Then you wish the Committee to understand that those persons who were in possession of stake-net fisheries before, have nearly lost the whole value of such fisheries, and that all the fish formerly caught by them now come into the rivers, and are there taken?—I don't know any of those stake-net fisheries where any fisheries existed before, therefore they could lose nothing of what they formerly possessed.

You have stated that you consider all the fish that were formerly taken in stake nets now come into the river?—Yes.

Consequently that whatever is gained to the river is a loss to those sea fisheries?—In point of fact I don't know of any actual fishery being there previous to the stake nets.

The Committee mean, that where fish were taken by stake nets there; they have ceased to be taken; do you conceive that to the extent they were taken before they are now enjoyed by the upper fisheries?—I conceive that the stake nets are intercepting the fish going to the upper fisheries, and they enjoy what they always have done before.

Do you consider that stake nets where they existed were very successful in taking fish?—I cannot say what the success of all of them has been, and they fell off every year after the first. The more they were multiplied the less fish was taken in each. A stake net where I got about seven hundred salmon the first year, did not produce, I believe, three hundred the last year.

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Can you inform the Committee respecting the number of fish which are now caught in any of the stations which were formerly fished by stake nets?—There have no regular accounts of the fishings been kept.

You have said that the fish that the stake nets catched were all seeking the rivers, but that they cannot get into the rivers at all seasons, the rivers not being in a state to receive them?—In very dry weather the fish cannot get up the small rivers.

You said also that the fish of one river are seldom or never to be found in any other river?—Every one of the five rivers in that part has a distinct species of fish; one of them, for instance the river Ainag, produces a short thick fish, so broad, that when slit up it is almost circular; the tail is particularly small, and the distance between the dead fin and the tail is very short; they average about fourteen pounds weight. In the next river, the Cassly, there is a small neat fish averaging seven pounds weight. The fish of the Shinn are large and long, without corresponding breadth, and averaging about sixteen to eighteen pounds. In the Carron the fish is also a well-made fish, carrying the breadth well on to the tail, averaging about ten pounds weight; and in the Oykel the fish average about twelve pounds, and in their form they are a medium between the Carron and the Shinn fish, but not carrying the breadth well on to the tail. We never get in any of those rivers any salmon except those that are evidently of the same breed or family, The river Carron being nearest the sea, all the salmon going up might be supposed to enter it promiscuously, yet only its own salmon are found in it; all the others pass on, each going up its own river when it reaches it. Sometimes we get a few straggling fish in a river during the season of the other.

When fish cannot get into their own rivers, from a deficiency of water, what do you conceive becomes of them; do they remain in the sea upon the coasts, or in the estuaries in the neighbourhood of the river?—In the early part of the season they are all caught at the mouths of the rivers; but in the summer time fish very often ebb and flow with the tide in the frith, when the rivers are low; if the rivers continue low till after the 26th of August, all these become spawning fish; and it is by killing these fish, I think, the stake nets do one of the greatest injuries to the river; for in ebbing and flowing, they have repeated chances of catching them, and thus lessening materially the number of breeding fish.

At what season of the year is it, generally, in your part of the country, that there is a deficiency of water, by which salmon are prevented from going up the river?—In dry weather, in the summer.

Are you aware that salmon are destroyed, in great numbers, by grampuses and seals, when they cannot ascend the rivers?—I never saw any grampuses in that quarter; there are seals in the frith.

Have you reason to believe that those seals are destructive of salmon?—I caught, last year, forty-five seals in seal nets; I dissected some of them, but I never found salmon in them; I have found flounders in them, but I believe they eat the salmon.

Do you not conceive, that when salmon are prevented ascending the rivers, they are exposed to such destruction by seals?—I consider that salmon are at all times exposed, in passing the banks where seals lie, to be destroyed by them. When I had stake nets the seals watched the stake nets; and I have seen them go below me, when in a coble, and take the salmon out of the stake nets; they generally watch the stake nets; I consider the stake nets as a sort of barrier, that facilitates their taking them; it is like putting a man up against a wall.

You have said that there is a fall in the river Shinn; does the tide flow as far up as that fall?—The fall is about a mile up the river, and the tide does not flow above a few hundred yards up.

What is the height of that fall?—About ten feet; in floods it is not so much as when the water is low.

You have said that salmon leap this fall at an early part of the season?—They don't begin to leap till about the beginning of summer, or nearly so.

At what season is it that the greatest number of salmon attempt this leap?—During the warm months in the summer.

What becomes of the fish which are seeking to ascend the river at this fall, and are incapable of effecting it; do they go back to the sea, or what becomes of them?

There is a very deep pool at the fall, and I have seen many hundreds of them in that pool; I have sat upon the banks, and seen them leaping, two or three score in an hour's time, and all attempting to force their way up. I never saw any of them

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going down; those that cannot get up, I suppose, endeavour to breed between that and the mouth of the river.

You have said that you have seen large quantities of fry in the stake nets in the Dornoch frith; be so good as state what kind of fry they were?—They appeared to me to be principally herring fry.

Is the Committee to understand that there were any salmon fry found in those nets?—I have been told, by the fishers, that there were, but I did not see them when I was present myself.

Be so good as mention in what nets you were told that salmon fry had been seen?—They did not mention any particular one of the nets. I have seen, with my own eyes, the people carrying away the fry in baskets and sacks, and I have eat of them, and they were very nice; there were great quantities of them.

Do you state, in point of fact, that the fry which you have seen carried away were caught in stake nets?—I do; I saw it with my eyes; a number of the people who carried them away are still alive.

You before stated that you had never seen salmon fry in a stake net; you now state that you had seen them yourself?—I did not say salmon fry; it was fry in general.

And therefore you cannot yourself state that it was salmon fry, which you say the people carried away; then the Committee are to understand that you don't know of your own knowledge that salmon fry were at any time taken in your neighbourhood in stake nets?—I did not say the salmon fry, I said fry in general; but I did not investigate particularly what species of fry it was, which I have since regretted.

Then you don't wish the Committee to understand that you entertain an opinion that the salmon fry are taken in stake nets?—I cannot speak as to salmon fry, but as to fry in general.

Can you inform the Committee whether there be any distinctive marks between salmon fry and herring fry?—There is a great difference between them.

Do you know whether salmon fry have a similar fin?—Herring fry are quite different from salmon smelts, but I never, in point of appearance, examined the fins of either particularly.

You have said that salmon go up, in the rivers you are acquainted with, clean and in good order, from the sea, in the months of January and February?—I do; I never caught a foul one at those times.

You said also that you never knew them to return until they return as kelts, after spawning, in the end of the season?—Yes.

The Committee think you said that clean fish are deteriorated by remaining even for a short time in fresh water?—I don't suppose that a few days make much difference; but I consider the deterioration to be progressively going on, as they continue in fresh water till the spawning time, and then they get, like birds when hatching their eggs, quite lean and disgusting, as if nature intended to take away all temptation for killing them. At that time I suppose fresh water is their principal nourishment.

Do you think that all the fish are killed by the fishers, above or in the upper part of the river, that do not go down as kelts?—I suppose that all the fish that are not killed, spawn, and do descend as kelts.

At what season do you find the greatest number of kelts in the river?—The kelts go down with the winter floods during all the winter and spring; some of them remain even in the rivers till May.

In what months do those floods of which you speak generally take place?—At different times, as may happen.

Can you state the months in which they generally happen?—We find a number of the kelts lying dead on the shore after spawning, and I suppose they go down the rivers as I said with every flood, during the winter and spring months; some go down with each flood, and some remain even till the month of May.

At what time do the salmon fry descend into the rivers with which you are acquainted?—In general in the months of March or April, but I have seen smelts in the months of January and February, in the river Shinn. I have killed river trouts, with salmon smelts at that time in their stomachs; I consider the trouts as being the greatest enemies that the salmon have.

But you consider that March and April are the two months in which, generally speaking, the greater quantity of the fry go down?—I do; the greatest numbers go down then.

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Is it a fact that kelts taken in the commencement of the fishing season are the perquisite of the fishermen?—Formerly they were, but not now, I believe, any where; with me they never were so; any kelts that may be taken occasionally in the nets are carefully returned into the river, and sometimes they are marked. I have already stated the circumstance of a grilse kelt having been marked, and returning a salmon in 1824.

Can you inform the Committee about what time the spawn of the salmon come into life, and at what time the young fish become detached from the gravel of the spawning beds?—I conceive that in some rivers fish spawn earlier than in others, and that in those rivers the fry come sooner into life; but I have never particularly examined into that fact.

Can you state what interval there is between the deposit of the spawn and the spawn coming into life?—I don't see how it is possible to ascertain that, unless there were only one pair of salmon in the pool, and that they were detained in that pool. When there are different salmon at different times in any part spawning, it is impossible to make distinctions to be depended on.

What do you consider the effect of dragging a coble net over the beds of young fish rising up in the gravel?—The coble nets are always worked in deep water, in pools; and the spawning beds are always upon shallows; but I don't think that even if the ground rope of the coble net did go over the shallows or spawning beds they would do the least injury to the spawn, because there is a buoyancy in the water that floats down the rope over the gravel; the thing, however, never happens in point of fact.

Do you consider that the ground rope, and the weight of the coble net, can be no injury to the shallows or spawning beds?—There are very seldom weights; the ground rope is made of sufficient weight to sink the net, but our nets are never used on shallows.

Do you not attach different weights to the ground rope to your nets according to the state of the water?—In the pool, where the stream is rapid by floods, that may be sometimes necessary, but seldom, if ever; in general there is none. The ground rope is made of old net of sufficient weight to sink the net.

Can you describe relatively the effect of the stake net and the coble net used in the same part of the river, as to which of them destroys the most fish?—I never saw a stake net placed in a river.

In any part or station where it is placed?—Where there are coble nets the fish pass often from one net to another; even in the act of hauling the net the fish pass on to the adjacent nets; but if a stake net or fixed engine were placed there it would shut the door upon the second coble fishing entirely, and render it useless.

Do you consider a stake net to be a more effectual engine for killing fish than a coble net?—They are generally used in different parts; they are not applicable to the same places; the one is generally placed in rivers, and the other along the coasts, although there are also coble fishings along the coasts.

Which of the two engines do you consider the most destructive of salmon?—I consider the stake net as being the most destructive, because I conceive that stake nets might be multiplied so as scarcely to allow any fish to escape to the rivers.

Might not coble nets be multiplied equally to any extent, and so be made equally destructive?—Coble nets, I conceive, never can be made so destructive, because they can only fish at certain times of the tide, and they don't extend so far out; stake nets will catch fish at all times of the day and night without ceasing, and are generally of great extent.

Might not coble nets be multiplied and rendered as numerous as stake nets?—Not so as to catch fish; they can only catch fish at particular places, and at certain times of the tide.

During the period in which both modes of fishing were employed in the frith of Durnoch, did you observe generally that the quantity of fish was greater or less than when only one mode of fishing was practised?—There have been no regular accounts kept of the fish for many years; but I believe that fish were in much greater plenty in those rivers formerly than since the stake nets were introduced.

Do you wish the Committee to understand that no other causes have, in your opinion, operated to diminish the number of fish than the introduction of stake nets?—I believe there has been a great deal of poaching at all times, both formerly and now

Is not the effect of such poaching in the upper part of the river greatly to decrease the general produce of the river?—Poaching must always decrease the number

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of salmon in the rivers; the small rivers may be easily run out by poaching, and by over fishing.

Then can you account for the diminution of the quantity of fish merely by poaching, without reference to the stake nets?—I have already said, that poaching has existed at all times; and when stake nets, or additional modes of fishing, are added to the former modes, the fish must necessarily become scarcer, and the breeders fewer in number. I consider it easy, by poaching and over fishing, to run out the small rivers, as I have already said.

You have said, that the greatest quantity, if not all the fry you observed to be taken in stake nets, was herring fry; are not salmon fry as much liable to be taken in stake nets as any other species of fry?—I should think the herring fry are more liable because the quantities of them in the stake nets, appeared to me so great.

Do you conceive that the salmon fry can pass through a stake net without being intercepted?—I conceive that all fry can pass through stake nets; but it seems, from some cause that appears to me quite unaccountable, to be their nature to remain in the easy water, within the stake nets, till the tide leaves them.

Is there no sea weed, or other matters, which collect around the stake nets, that would intercept fry?—Very little, in most of our stake nets.

You have stated, that the stake net was a much more destructive mode of fishing than the coble, and the reason you gave was, that the stake net extended so far, and was catching fish at all times, and the coble only at particular times; do you mean to say, that the stake nets catch fish at low water?—Stake nets cannot catch fish when they are dry.

You have said, that they catch fish at all times?—I mean that they catch them day and night, without ceasing during all times of the tide, when there is sufficient water.

Cannot the coble net be used when the tide is about half made?—That depends entirely upon situations; the coble net can be used at one place at the time of the tide, when it cannot be used at another place at the same time of the tide.

Is there any situation in which the coble net can be used at all times of the tide, or nearly at all times of the tide?—I conceive that there are such situations, but they extend every where but a very short way from the shore; the stake nets, in general, extend a great distance from the shore.

Is there any other reason why you consider stake nets to be more destructive of salmon than coble nets?—Stake nets are, in every situation, a more extensive and formidable mode of fishing than cobles. I consider one stake net to be equal to four or five cobles at least; I mean in the sea, or along the coasts or friths.

And you consider that the destruction of a greater number than a due proportion of fish, in the period of one year, must tend necessarily to diminish the breed for a course of years to come?—I certainly consider that it will lessen the number next year, at least, but for how many years I cannot say; if repeated, it must always lessen them all considerably.

You have stated, in a former part of your evidence, that it was possible to run stake nets across the water, from side to side, where the water was shallow; the Committee want to know how you can be able to take the fish out of these nets?—With hand nets; and besides, you can put the catching places upon the shallowest situations.

Did you discontinue the stake nets, which you at one time had, before or after the decision of the House of Lords in the great Tay case?—I was under the necessity of having stake nets in self defence, as tenant of the river fishings, at the very time I was doing all I could to have them suppressed; they were totally given up at that period upon the decision of the Tay case being known.

Why did you put them down?—Because I thought them quite destructive to the river fishings, and that the rivers never could be brought to their most productive state while stake nets were permitted. The river heritors, too, would not be nursing the fish for others. Of the sixteen conservators that I had upon the rivers I would not have one if stake nets were in the frith, nor would I allow one fourth part of the fish that I have done to run up the rivers as breeders; our motto would then be, "*catch all that you can*;" which would lead gradually to the extirpation of the species, or nearly so.

Do you consider that the rights of the river proprietors ought to be protected to the fullest extent, and that persons having a right to sea fisheries should not be permitted to use them in such a way as to be applicable to their case?—I conceive that the properties of all, whether sea or river fishings, were purchased according

M. Mackenzie, Esq.

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to their respective values, as fixed by the established usage of the fishery, and if the one was of little value, according to that usage, then only a little price was given for it. It is the new operations, I conceive, any of the parties have a right to complain of, because they were unknown at the time they purchased their properties.

Are there not many cases where properties are inherited, and where there have been no purchases made, and where therefore the rights of all are in that respect equal?—All properties must have been purchased at some period or other, and if there were no rents paid for fishings, there was of course nothing paid for the fishery. I conceive that the relative value of the whole fishing properties has been fixed, as I said, by established usage, and while that usage is adhered to no party has a right to complain.

Are there not many stations in estuaries upon the sea coast where salmon can alone be taken in considerable numbers by means of stake nets?—There are some stations where coble fishings (which I conceive to be the established mode of fishing) cannot be used. Stake nets may be used there to greater advantage; they are always most productive where they are most in the way of salmon proceeding to the rivers, and have most tide.

Mr. *Alexander Fraser*, called in; and Examined.

Mr. Alexander Fraser.

WHERE do you reside?—In the parish of Inverness.

Are you by profession a fisher?—Yes.

With what river in Scotland are you particularly acquainted?—With the river Ness in particular, and I know a little of Beauly.

Have the salmon fishings in those rivers greatly diminished in late years?—In the river Ness, very much indeed.

What are the modes of fishing upon the river Ness, and in the estuary connected with it?—With the coble nets in the river; and stake nets, yairs and still-nets, in the estuary.

Have all those modes of fishing been practised from time immemorial, or from your earliest recollection?—Yes, except stake nets.

How long have the stake nets been used?—In the Moray frith, about sixteen years now.

Can you deliver in to the Committee a written statement, showing the net quantity of fish taken in each year between the year 1812 and the present year?—There are three fishing seasons that I cannot account for; but up to this year I can, as will appear in this written statement.

[*The witness then handed in the following statement:*]

STATEMENT of the Number of Salmon killed in the Ness in Twelve Years.

1811.	1811–1812.		1812–1813.		1813–1814.		1814–1815.		1815–1816.		1816–1817.		1817–1818.		1818–1819.		Total Salmon Monthly in Eight Years.
	Sal.	Gr.	Sal.	Gr.	Sal.	Gr.	Sal.	Gr.	Sal.	Gr.	Sal.	Gr.	Sal.	Gr.	Sal.	Gr.	
Dec.	226	-	454	-	391	-	240	-	324	-	422	-	128	-	220	-	2,405
1812.																	
Jan.	427	-	565	-	354	-	204	-	370	-	1,052	-	388	-	194	-	3,554
Feb.	194	-	874	-	289	-	296	-	298	-	696	-	326	-	266	-	3,239
March	103	-	591	-	522	-	164	-	645	-	490	-	270	-	244	-	3,029
April	157	-	461	-	227	-	195	-	283	-	370	-	248	-	206	-	2,147
May	29	-	157	-	359	-	152	-	102	-	246	-	34	-	48	-	1,127
June	6	39	18	27	69	180	7	20	16	11	40	-	10	-	4	-	170
July	25	211	38	208	21	263	51	97	40	164	57	184	12	147	9	84	253
Aug.	236	1,361	318	700	221	710	292	186	187	406	604	340	260	286	74	240	2,192
Sept.	77	482	74	169	15	97	21	142	18	126	178	187	19	170	28	120	430
	1,480	2,093	3,550	1,104	2,468	1,250	1,622	435	2,283	707	4,155	711	1,695	603	1,293	444	18,546

	Sal.
1819–1820 - - - - - - - - -	1,215
1820–1821 - - - - - - - - -	1,806
1821–1822 - - - - - - - - -	710
1822–1823 - - - - - - - - -	344

The

The Ness never freezes with the most intense frost.

Though at Inverness, in 1807, the thermometer for nearly ten days was 23 to 30, and even 40 degrees below the freezing point, it made no impression on the river or lake, which can be attested by every inhabitant.

The Ness was always privileged as earlier than any other river in Scotland from this cause, and it will be evident that the only valuable part of the season's fishing is the salmon taken in December and January; for, although they appear to be only one third of the total number, yet from their size, they constitute more than half the weight.

Alex^r Frazer.

Mr. Alexander Fraser.

6 May, 1825.

What is the close time observed in the river Ness?—From the 26th of August, upon the river, to the 10th of December; the mouth of the river, from the tide-way, is fished upon the 19th of September.

Do you think an extension of that period would conduce to the advantage of fishing?—I do.

Should the close time be the same for the river and the estuary?—I am of opinion that it should.

Up to what period, in your opinion, would it be fit to extend the close time?—In the river Ness, the greatest part of August and September should be added to the close time.

And should it not be extended also in winter and spring?—I am of opinion that it would be of no use in the river Ness.

To extend it beyond the present time?—Beyond the 10th of December.

Does that observation apply equally to the Beauly frith, and the other rivers you know?—No.

What close time would you suggest for the river Beauly?—In the river Beauly we never catch fish that signifies any thing till the month of March.

You know no other rivers than the Ness and the Beauly?—I am not much acquainted with any other river.

At what period of the year do you consider that the fish begin to ascend the river Ness and the Beauly?—I mentioned that the Beauly does not fish much till March.

At what period do the fish begin to ascend the river?—Clean salmon is passing up the river Ness every day of the year; except in the months of June and July very few pass up.

Is there no season at which a greater proportion of fish is found than at any other?—Yes.

At what season have you observed the greatest proportion of foul fish?—The greatest number is passing up the river in the months of August and September, when the fish are ready to spawn.

At what season of the year do the fish begin to descend and return to the sea?—In the months of February, March and April.

Are those fish clean too?—No.

Then there are three months in which there are no clean fish in the river?—There are clean fish going up every day in the year, but fewer in June and July.

Do the fish spawn every month in the year?—I have often seen them foul; they spawn in every month of the year, and I have got them in the nets within a week or a few days after spawning in every month of the year.

At what time do the fry descend from the river to the sea chiefly?—Early in April.

How long do they continue to descend?—Those that are near the river's mouth, or the sea, will be down with it in a few days.

Do the fry descend every month of the year?—No; there are so few of them that I cannot say I ever saw them except in the months of April and May.

Then you consider that no alteration in the present close time, with reference to the river Ness, is advisable?—I think that there should be more close time.

But only in the autumn?—Only at the latter end of the season, when they are full of spawn.

You have just told the Committee that you have seen them full of spawn in every month of the year?—I have, but not a hundred of them in my life time; I have got some of them full of spawn in every month of the year.

To what cause do you ascribe the diminution of salmon in the rivers?—To poaching, which is carried on to a very great extent, that is by killing the breeders.

Is there no other cause?—Yes.

State all the causes to which you ascribe the diminution?—The fry has not an opportunity of returning to the sea, and spent salmon of late years; they fall into

Mr. Alexander Fraser.

6 May, 1825.

the Caledonian Canal, and there is no regulation as yet to open the gates to let them pass through. The next cause is mills upon the river. Such as escape the mouth of the canal must pass under the wheels of those mills, and in my young days there were sluices to let the fry salmon out from those mills; but that is done away with some years ago.

Do you consider the stake nets to have had any influence to diminish the breed of salmon?—Yes, I do.

Is it consistent with your knowledge that the river fishery has decreased in proportion as the stake net fishery has produced?—It has.

Can you state the total amount of the rental of the lower fisheries of the river Ness sixteen years ago?—Yes.

What was it?—For five cobles, 1,055*l.* 11*s.*

What is it now?—The five cobles are 124*l.*

Can you state the value of the stake-net fishing when first established, and when the estuary of the Moray Frith, and the estuary of the Ness, were first established?—I think it was about 100*l.* when first established.

What is it now?—Upwards of 350*l.*

Then the general quantity of fish caught by both modes now is much less than by one mode formerly?—I am not sure; but when all the salmon caught in the stake nets are added together, but it will exceed the greatest number taken on the Ness since 1811.

The Committee wish to ask you whether or not the general rental of both be not much less now than the rental of one was sixteen years ago?—Yes.

The Committee want to know whether the number of fish now caught by both modes of fishing be not greatly less than the number caught sixteen years ago?—It is not less.

In what proportion is it to be considered?—I have the number taken down of so many of the stake nets, but not of them all.

Does not the proportion of the rental indicate the proportion of fish caught?—Yes.

At both periods?—Yes.

Is it not then obvious that the stake-net fishings have contributed to the diminution of the fish?—I have no doubt about that.

Do you consider the stake nets destructive of the salmon fry?—No.

Did you never see salmon fry in a stake net, or around it?—There were none found for the last two seasons. I directed my men to examine them, and to look at every small thing they found, and to let me know.

At a more remote period have you never seen any fry?—No, nor have I ever heard of any to be seen in my nets.

You don't think the stake net capable of intercepting or destroying the fry?—If not kept clean they may.

They may destroy them if not kept clean?—Yes.

Are they generally kept clean?—Sometimes they are not, with a storm; my men cannot get at them in stormy weather.

But in point of fact, you never saw fry destroyed in stake nets?—Never in my life time.

You have stated that clean salmon were found passing up the river Ness every day in the year?—Yes, except as already stated.

Should you think it advisable that fishing should be permitted at all times when clean salmon are to be found?—I should think they ought to be taken when they can be found clean.

Is it your opinion that it is possible to continue fishing safely for the purpose of taking a small number of clean salmon when unsound fish are in the river?—I think it is possible. There is only half a mile of the river Ness hauled with the net altogether, and it is about seven miles in length, so that the nets do not go near the place where the salmon spawn, which is never hauled with the nets.

Do you mean to say that it is possible to take clean fish at such a time, and not to take the foul fish that may be mixed with them?—Some few may be taken in the net.

What would you do with the foul fish?—Throw them out again.

Do you believe that every fisherman would throw into the river such unsound fish as you might take?—I am afraid they would not.

Have you yourself ever thrown into the river unspawned fish that you had accidently taken?—I dare say a thousand within the last ten years.

Is

Is it not of great importance that every unspawned fish should be permitted to spawn, and should not be subjected to the risk of destruction?—Surely, I am of that opinion. *Mr. Alexander Fraser.* 6 May, 1825.

You have said that the spent fish begin to descend the river Ness in the months of February, March and April?—Yes.

Is there not a risk of such unhealthy fish being taken by fishing for clean fish when they are descending the river?—They are taken regularly.

What is done with them?—They are the perquisite of the fishers when they get them.

What proportion do you think the spent fish bear to the clean fish in the month of February, the first month you say they descend?—There is not so many of them returning in the month of February as there are clean salmon going up.

In the month of March, what proportion do they bear to the clean fish going up?—The same number.

You say, in point of fact, that there are the same number of spent and clean fish taken in the Ness in the month of March?—Up to this time such has been the fact.

What would become of the clean fish that are in the river in February and March if the fishery were not to commence until the 1st of March?—They would gradually go up the river, and into Loch Ness.

You have stated that you have seen fish full of spawn, and spent fish, in the river Ness at all periods of the year?—Yes, every month of the year.

And also clean fish in the Ness on all days in the year?—Every week in the year.

Is it, in your opinion, impossible that any distinction should be made which should absolutely secure the taking of clean fish at one season of the year, and the safety of the unclean fish at another season?—I am of opinion that the breeders should be secured and protected as much as possible.

But that it is impossible to fix upon any season which would enable you to take the clean fish, and the same time to secure all the breeders?—The spawning is in the river Ness altogether over in the first week in January.

But the spent fish remain in the river sometimes, and afterwards return?—They come down sixty miles; so that it would be the month of May before they would all return.

You have stated that the fry go down in the months of April and May?—Yes, those that are near the sea get down in the month of April, and those that are forty or fifty miles from it would come down in the month of May.

Do you consider that there must be a similar difference in point of time in regard to the spawning fish, and that the farther the fish has to go to spawn the later they would be of doing so?—They spawn earlier in the higher parts.

Lunæ, 9° die Maii, 1825.

THOMAS FRANCIS KENNEDY, ESQUIRE,

IN THE CHAIR.

Mr. Alexander Fraser, again called in; and further examined.

YOU have stated in your former examination that one great cause of the decrease of salmon in the river Ness is the poaching, which is carried on to a very great extent?—Yes. *Mr. Alexander Fraser.* 9 May, 1825.

Do you consider that poaching out of season is the most considerable cause of the decrease of the salmon fishery?—I consider it to be so; and the long continuance of it in the months of August and September adds greatly to the decrease of the salmon.

The Committee think you also stated, that there was not an opportunity given to the fry of descending to the sea?—Yes.

And also the spent salmon?—Yes.

Do you consider it of the greatest importance that all precautions should be taken to enable the fry to return to the sea?—I certainly do.

Do you consider it also of the greatest importance that the spent salmon should find their way to the sea?—They are not of such great value, but it is better to protect them as much as possible.

Mr. Alexander Fraser.

9 May, 1825.

Do you consider that spent salmon return after having been in the sea as good fish?—I am sure that they do, some of them.

Do you also consider that a spent salmon may become a breeder in the following season?—I am quite sure of that too.

Do you consider that it is of importance that salmon generally should be prevented from getting into mill streams?—Yes, I am of that opinion.

State your reasons?—The wears and carries are built so strong and close now, leading the water to the mills, that the fry and spent salmon that escape the mouths of the canal have no other way to get to the sea but under the wheels of these mills.

But if those salmon were prevented from getting into the mill streams could they not get into the river?—If there were a sluice or gap above the wheels of the mill they could get down into the river.

Did you not say that there was a sluice formerly by which the fish did escape?—Yes.

How was it removed?—The mills of late are going day and night, and it is necessary to keep all the water to the mill, and there is now no sluice.

The Committee think you stated in your former evidence, respecting the river Ness, that if the whole value of the fisheries twenty-five years ago were compared with the value now, that there would not be much difference?—I dare say there are less salmon taken now than then.

And what do you consider the cause of that decrease?—There was an alteration that took place upon the river Ness regarding the Saturday's slap, lowering the cruives, and taking away the cross dyke that was in the river.

By whom was that alteration made?—By the upper heritors of the river Ness insisting upon getting it done; there was an act of Parliament in their favour.

Then you attribute the decrease in the lower part of the fishery to the circumstance of the salmon being permitted to ascend to the higher fisheries?—Entirely so.

The Committee think you stated, with respect to the River Beauly, that you never commenced fishing there till the month of March?—They tried earlier, but here were very few got till the month of March, if it be open and no frost.

You mean to state that there is no salmon taken in any manner in the Beauly river till the month of March?—Not to my knowledge.

You stated that no salmon fry were ever found in your stake nets?—None that ever I heard of.

Were you a proprietor or manager of a stake net at Campbeltown, upon the Moray frith?—Yes, for four or five years.

You never found any salmon fry in that net, did you?—Never.

Do you happen to know the amount of the rents agreed to be paid for the several fisheries in the Ness, for the year now current?—Yes.

State the amount?—It is about 120*l.* for the lower fishings only.

Do you mean that the aggregate rent is 120*l.*?—The river rent.

But that is the whole of it?—That is the whole of it.

You stated the rental of the salmon fisheries in the river Ness, in particular years; can you inform the Committee of the amount of that rental for each year, during the last twenty-five years?—Yes.

Can you deliver an account thereof?—Yes.

You have spoken before of the produce of certain stake nets; be so good as state what stake nets you refer to?—I referred to my own stake nets, and another close to me, which I saw almost every week.

Where are those stake nets?—The farthest off is about ten miles from the river Ness, upon Lord Moray's estate, near Campbeltown; the others are upon the Culloden estate, about five miles from the river's mouth.

Can you state the produce of those stake nets for a series of years, and for how many?—I can only state it since I got them myself.

How long have you had them?—Some of them seven, and the others four years.

Can you state the produce of them?—Yes.

[*This witness delivered in the following statements*]

RENTS paid for Fishings on the Ness from 1800 to 1825:

STATIONS.	1801.	1802.	1803.	1804.	1805.	1806.	1807.	1808.	1809.	1810.	1811.	1812.	1813.
	£.	£.	£.	£.	£.	£.	£.	£.	£.	£.	£.	£.	£.
Ness Lower Fishings	1,055	1,055	1,055	1,055	1,055	1,055	1,055	1,055	1,055	1,055	1,055	1,055 600	1,055 600
D° Holm	–	–	–	–	–	–	–	–	–	–	–	–	–
D° Dunean	-	-	-	-	8	8	8	8	8	8	8	16	16
D° Aldourie	-	-	-	-	5	5	5	5	5	5	5	15	15
D° Ness Castle	-	-	-	-	8	8	8	8	8	8	8	16	16
D° Dochfour	-	-	-	-	10	10	10	10	10	10	10	30	16
D° Glemorriston	-	-	-	-	-	-	-	-	-	-	-	10	10
D° Urquhart	-	-	-	-	-	-	-	-	-	-	-	8	8
D° Foyers	-	-	-	-	-	-	-	-	-	-	-	20	20
D° Ahertarff	-	-	-	-	8	8	8	8	8	8	8	8	8
D° Glengarry	-	-	-	-	10	10	10	10	10	10	10	10	10
D° Glengarry Cruives	-	-	-	-	-	-	-	-	-	-	-	15	15
£.	1,055	1,055	1,055	1,055	1,104	1,104	1,104	1,104	1,104	1,104	1,104	748	748

(Repeated.) STATIONS.	1814	1815.	1816.	1817.	1818.	1819.	1820.	1821.	1822.	1823.	1824.	1825.
	£.	£.	£.	£.	£	£.	£.	£.	£.	£.	£.	£.
Ness Lower Fishings	1,055 600	1,055 600	1,055 600	735	375	375 –	375 –	250 –	250 –	120 –	120	120
D° Holm	-	-	6	6	6	6 –	20 –	20 –	20 –	20 –	15	15
D° Dunean	16	16	25	25	25 –	25 –	25 –	25 –	25 –	25 –	25	5
D° Aldourie	15	15	35	35	35 –	35 –	15 –	15 –	15 –	15 –	15	5
D° Ness Castle	16	16	45	45	45 –	45 –	45 –	45 –	45 –	45 –	45	5
D° Dochfour	30	30	30	30	30 –	30 –	30 –	30 –	30 –	30 –	30	–
D° Glemorriston	10	10	10	10	10 –	10 –	10 –	10 –	– –	– –	–	–
D° Urquhart	8	8	6	6	6 –	6 –	6 –	6 –	– –	– –	–	–
D° Foyers	20	20	20	20	20 –	20 –	20 –	20 –	20 –	20 –	–	–
D° Ahertarff	8	8	25	25	25 –	25 –	25 –	25 –	25 –	25 –	15	15
D° Glengarry	10	10	40	40	52 10	52 10	52 10	52 10	52 10	52 10	8	8
D° Glengarry Cruives	15	15	40	40	40 –	40 –	20 –	20 –	20 –	20 –	–	–
£.	748	748	882	1,017	669 10	669 10	643 10	518 10	502 10	372 10	273	173

E. E. *Alexr Fraser.*

SALMON taken in Stake Nets, in the Firth near the Ness, 1817 to 1824, as far as could be ascertained.

STATIONS	1816.		1817		1818.		1819.		1820.		1821.		1822		1823.		1824.	
South Side:	Sal.	Gr.	Sal.	Gr.	Sal.	Gr	Sal.	Gr	Sal.	Gr.	Sal.	Gr.	Sal.	Gr.	Sal.	Gr.	Sal.	Gr.
Fort George	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Campbeltown	-	-	-	-	-	-	-	-	-	-	414	767	333	505	211	809	313	417
Culloden & Artirley	-	-	-	-	-	-	-	-	415	560	322	326	365	407	316	436	–	–
North Side:																		
Chanonry	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Avoch	-	-	40	633	221	340	240	301	117	130	104	102	98	213	86	256	–	–
Kilmuir	-	-	11	227	101	141	156	312	51	190	101	162	83	203	85	222	–	–
Craigton	-	-	-	-	-	-	-	-	158	249	–	–	–	–	–	–	–	–
Red Castle	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
											941	1,357						

N. B. This Account could not be rendered more complete, as no record was kept of some of the fishings.
Alexr Fraser.

Mr. Alex. Fraser.

9 May, 1825.

Have any stake nets been put down of late years in your neighbourhood?—Yes.

At whose instance were they so put down?—At Mr. Fraser's, of Lovat.

Has there been any increase in the produce of the river fisheries since those stake nets were removed, so as to make the produce of the river now equal to all that they formerly caught, and all that the stake nets hold?—No, it had not that effect upon the river.

Do you consider, therefore, that a quantity of salmon is lost to the public by the suppression of those stake nets?—I am of opinion, that the salmon taken in these stake nets that were put down would find their way into the river Beauly; the stake nets were above the river Ness.

Do you consider that stake nets, generally speaking, account in any degree for the decrease of the salmon fisheries in your neighbourhood?—I do not think that they do.

Mr. *Alexander Leslie*, called in; and Examined.

Mr. Alexander Leslie.

9 May, 1825.

WHERE do you reside?—In Beauly, in the county of Inverness.

What is your profession?—I am a salmon boiler and fisher.

What rivers are you particularly connected with in Scotland?—Beauly.

And no other river?—Not at present.

How long have you had the charge of the fishings in the river Beauly?—For eight seasons.

Have the fishings upon that river decreased in number and value, or increased, during those years?—It has decreased in value, but increased in number.

You know of nothing previous to the period of eight years?—I have extracts from the books that were kept before that time.

Were they your own books?—No.

Can you produce a statement of the number of fish actually caught in each of those years?—Yes, the weight of them; I have it for twenty years.

And the number of them?—No; I have not brought that here.

Give in that statement as to the eight years you speak of?—Yes.——[*Here the witness handed in the following statement, showing the produce of the Beauly, in weight, since the year* 1817.]

	Tons.	*cwts.*	*qrs.*	*lbs.*
1817 - - - - - -	19	12	3	1
1818 - - - - - -	18	14	0	1
1819 - - - - - -	23	0	3	0
1820 - - - - - -	26	16	0	9
1821 - - - - - -	26	6	0	20
1822 - - - - - -	22	6	2	4
1823 - - - - - -	18	18	1	1
1824 - - - - - -	29	1	2	14

In 1819, five stake nets taken down in the Beauly frith.

What are the modes of fishing usually practised in the Beauly river and frith?—The net and coble in the tideway, and the cruives in fresh water above the tideway,

Are there any stake nets in the Beauly?—None belonging to the Beauly fishers; there are in the frith.

What do you consider to be the Beauly frith?—All above Fort George; there are ten stake nets between Fort George and Kissock, and six yairs above Kissock.

Are yairs equally destructive as stake nets?—More so to the fry.

And do you consider stake nets to be also injurious to the fishing?—I consider that stake nets intercept the fish going to the river.

You consider stake nets intercept fish going to the river; do you also consider that they intercept the fry going down?—I have seen fry in one of them.

In what quantity?—I did not count them; there were five large baskets full, and about a fifth part of the fish in those baskets were salmon fry.

What is the close time observed in the river Beauly and the Frith?—For the last six years we have never begun fishing till the 1st of February, and have left off on the 26th of August; we may begin on the 11th of December, and fish up till the 26th of August; stake nets and yairs have fished until the end of October.

What would be the best fishing season for the Beauly?—From the 1st of February to the 26th of August.

Have you observed at what period the fish generally begin to ascend the river Beauly from the sea?—About the 1st of February, and continue to do so till the middle of September.

They

They begin on the 1st of February?—Yes, or a little earlier.

Are those fish all clean?—Perfectly clean; they are all clean in the month of February; I never saw a spawning fish in February in the Beauly.

Did you observe the state of the roes of the fish in that month of February?—Yes.

Describe it?—The roe would be about three inches and a half long, and a quarter of an inch in diameter; the seeds of it then are less than mustard seed.

What space of time do you believe to intervene between that period and the period of spawning?—From eight to nine months.

Do you consider the fish to be eight or nine months in the river before it will spawn?—Yes; from February, I would.

Is it clean during all those months?—The roe gets progressively on from December, or from the time it may have spawned, till it spawns again.

Is the fish good for eating during all that time?—They are.

During all those eight months?—Yes, during all those eight months; the last two months they are not so good.

Do you believe the fish to remain always eight months in the river before it spawns, unless it be taken?—If it ascend early enough in the season it will remain till it spawns; they spawn the latter end of October.

At what time have you observed the fry to descend to the sea?—From the end of February to the first week in May.

What size are the fry then?—I have seen them one inch and a half long, and also I have seen them six inches.

And what age do you suppose them to be?—Four months, or four and a half months probably; I mean from the time the spawn had been deposited.

Do you consider the coble-net fishing to be injurious or destructive to the fry in that state?—I do not.

Do you consider stake nets to be destructive of the fry in that state?—They would unless they are kept perfectly clean. I have seen salmon fry in stake nets.

Is it easy to keep them so perfectly clean as to preclude the interception of the fry?—By great attention it may be done.

Would yairs intercept the fry in the state you describe them?—They intercept them in all states; I have often seen thousands of fry in yairs.

Would cruives intercept them?—No.

Are cruives in any other respect injurious to salmon fishing?—I do not consider them injurious.

If there be no opening do not they intercept the fish going up the river?—They are made for catching the fish going up the river.

Are they not then injurious to the breed?—I conceive that when they are in a good state it is not injurious to the breed to kill the salmon while clean; and plenty of breeders reascend in September.

If you kill them all clean where would the breeders be?—We always open the cruives on the 20th August, and a regulated cruive would allow salmon of eight or nine pounds weight to go through.

Are the Saturday's slaps observed in the cruives on the Beauly?—No.

To whom do the cruive fishings belong?—To Mr. Fraser, of Lovat; the whole river is his.

Do you know any thing of any other river in Scotland but the Beauly?—I have cured the fish of the Locky, the Conon, the Alness in Ross-shire, and the Naver in Sutherlandshire.

Are the close and open times in those rivers the same as those in the Beauly?—They are by law.

And how are they, practically speaking?—From the 1st of February to the 26th of August in the Locky, the time that we had her.

Do you consider that to be the best time for all the rivers you know in the north of Scotland?—I conceive it to be the best time for the Conon, the Alness and Beauly.

Do you consider that to be the best time for some of those rivers you know in the north of Scotland?—I conceive it to be the best time for the Conon and the Alness.

Do you consider that to be the best time for all the rivers you know in the north of Scotland?—There are some exceptions.

State the exceptions?—I conceive the exceptions to be the Thurso, the Shinn, and the Ness.

What close time would you recommend for those rivers?—I should think from the 1st of January to the 20th August.

Mr. Alexander Leslie.

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For the Beauly?—No; for the Beauly, the Conon, the Locky and the Alness, I should consider the best time to be from the 1st of February to the 26th of August.

In point of fact, do you always fish in February in the Beauly?—When the weather permits we always do so.

Is the number of clean fish taken in February greater or smaller than the number taken in March?—Smaller.

Is the number taken in March greater or smaller than the number taken in April?—Smaller.

And in May?—In May it is greater than April.

In June?—It is scarcer.

In July?—It is more plentiful.

Have you a statement of those monthly proportions?—I enter them daily: I have no monthly statement here.

Can you distinguish the salmon of the Beauly from the salmon of the Ness?—Yes, I can.

Do you consider the salmon of all rivers to have some distinguishing characteristics?—I do.

In point of fact have you distinguished the fish of all these rivers from each other?—I have distinguished the fish of the Ness, the Locky, the Beauly and the Alness.

Can you account in any way for the different seasons at which the fish in those rivers respectively begin to ascend those rivers?—I cannot in point of fact. I might risk a mere probability, and that would be all. I would say it is their nature to do so.

Are there any porpoises in the Beauly or the Moray frith?—Not of any consequence.

Then you do not consider them as at all destructive of the salmon in those friths?—No.

Are there any seals in those rivers?—There are.

Are they destructive?—They must be in some degree destructive.

You stated that you had seen salmon fry in one stake net, but did not count them?—Yes.

Was that on one occasion only?—Only upon one occasion.

Do you mean to state your knowledge of salmon fry having been only once taken in a stake net?—I never saw them taken but once.

Do you know whether that was caused by any accident, or from a storm driving any sea weed into the net upon that occasion?—I believe it was principally owing to the carelessness of the fishers.

You did not hear that it had happened again after that one occasion?—I have only been there once since. I have been told that it had repeatedly happened, but I never saw it again.

You have stated that for the last six years you never began fishing till the 1st of February?—Yes.

Your only reason was, that you could not get, previous to that period, fish sufficient to pay your expenses?—That was the sole reason.

Do you get a considerable number of clean fish in the Beauly in February?—When the season is favourable we get a considerable number.

But more in March?—Yes.

And in April it is better than March?—Yes.

And in May?—In the first fortnight of May it is considerably better; it is the best of all.

Are there any spent fish in the Beauly in the month of February?—A few.

Do you take them?—No.

Do you avoid taking them?—We do take them ashore, but we let them go again.

Did you ever hear of spent fish taken in that way being a perquisite of the fishermen?—Yes.

Is it so with you?—It has not been so for the last six years.

Do you believe it to be so generally in the north of Scotland?—I do not think it is so now.

Is it so in the Ness?—No.

Do you state upon your own knowledge that it is so?—I have seen the overseers of the fishing of the Ness order their servants to let the fish go.

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And were they so let go?—Yes. This was in the Ness, and not in the upper rivers attached to the Ness.

Do you state, in point of fact, that the spent fish are all returned to the river if taken in the Beauly?—They are returned to the Beauly in our part of it, and there are no other fisheries belonging to it.

You have stated that you did not consider cruives as being injurious to the fishery?—Yes; I have so stated.

Do you consider cruives to be for the benefit of the owner of the cruives, or calculated for the benefit of the fisheries above the cruives?—There is no ground to fish upon above the cruives. The whole river belongs to Fraser, of Lovat.

In the rivers where there is ground above the cruives are the cruives injurious to the fishers above them?—I should not consider them injurious if properly regulated.

But if not properly regulated are they destructive to the upper fisheries?—They must intercept part of the fishing.

Have you ever been yourself connected with stake-net fisheries; and if so, state the number?—Never.

Are you the lessee of Lovat's fisheries?—No; Mr. Berry is.

And you act under Mr. Berry?—Yes.

Has he ever rented stake nets in that frith?—Not in that frith, but in the Dingwell frith.

Were the stake nets in the Dingwell frith successful in taking fish?—Not particularly so.

Did you ever see any fry in the stake nets in the Dingwell frith?—I never was there in the fry season.

You have stated your opinion that the fishery in the river Ness ought to commence on the 1st of January?—Yes.

What is your reason for that opinion?—Because the fish ascend there early.

Are there any unspawned and spent fish in the month of January in that river?—I have never seen an unspawned fish in the month of January in the Ness, but there may be some.

Are there spent fish in the Ness?—I have seen some.

Whether should you suppose that there were more clean fish or spent fish in the Ness in the months of January and February?—Considerably more clean fish.

Mr. *William Stephen*, called in; and Examined.

Mr. William Stephen.

WHERE do you reside?—Near Aberdeen.

Are you of any particular place?—Of the cruives of Don, near Aberdeen.

What rivers of Scotland are you particularly acquainted with?—With the Don generally, and with the Dee, which is close by.

Any other?—No; I am acquainted also with the sea coast adjacent to those rivers.

How long have you been practically acquainted with those rivers?—I have been a salmon fisher for twenty-five years.

Have the salmon fisheries upon the Don and the Dee increased in number and value of late years, or decreased?—In the Dee the number of salmon and grilses has considerably increased.

And in the Don how is it?—There is very little difference in the number of salmon and grilse; but the Don has, owing to the smallness of the fish, fallen off one third in point of weight.

What are the modes of fishing practised in the Dee and the Don?—In the Dee it is all coble nets, and in the Don it is by coble nets and cruives, and what are called hung nets.

Are there stake nets in the mouths of the Dee and the Don?—No, not at the mouths of the rivers, but there are some at a little distance from the Don mouth to the north of the Don.

Are there any to the north of the Dee?—None.

How do you account for the increase of the fishery in the Dee?—Formerly they were fished by two separate parties; the one party would have been fishing great quantities of salmon when the other would not be getting any, and they united both parties together, so that they both fished where salmon was to be found.

What are the close and open seasons for fishing in the rivers Dee and Don?—The close time in the Dee and Don is from the 20th of September to the 12th of December, that is the close time.

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Do you always commence on the 12th of December; in point of fact, in both those rivers upon that day?—Yes.

Do you consider that the best time for commencing?—No, I do not.

What season would you recommend as better for commencing?—I would recommend about the beginning or the first of February.

How long would you continue to fish?—Till about the middle of September.

Will you state to the Committee the reason for your preferring that time to all others?—Because I think that time would admit plenty of salmon in the rivers for breeders; as the salmon have all done spawning by the first of February, I think the sooner that the rivers are opened after that so much the better.

Have you a statement of the number or weight of the fish caught in each month, from the beginning of the opening to the 12th of December, the time you mentioned as the close of the fishing season?—I have not that here.

What month of the whole season do you consider to be the best?—Generally the month of August, in regard to number.

What proportion does February bear to August in that respect?—It bears a small proportion in respect to number, but in value it is considerable.

Can you state the exact amount as to value?—No, I cannot exactly state that.

Does the value arise from the scarcity of the article, or from the quantity killed?—From the scarcity of the article.

Have you observed many clean fish to ascend the rivers Dee and Don in the months of December, January and February?—Yes.

Have you also observed many foul fish in those months?—Yes, in the months of December and January I have seen a good number of foul fish.

But is the proportion of clean fish by far the greatest?—Yes; including the whole courses of a salmon river, there are more foul than clean fish in it during the months of December, January and February; but taking the low parts or fishing grounds of rivers, there are in these months twenty clean fish for one foul fish.

Do those fish that ascend in December, January and February, remain in the river till they spawn?—Yes, my opinion is that they do so.

What space of time do you believe intervenes between their ascending the rivers and their spawning?—Salmon ascending the rivers in the months of December, January and February, would not leave the river before spawning.

When do you believe them to spawn?—In the months of November, December, and January.

Do you consider salmon and grilse to be the same species of fish?—Yes, I do believe them to be the same species of fish.

Do you consider a grilse to be a young salmon?—Yes.

Have you observed at what period the fry begin to descend the river to the sea?—Some of them will begin to descend to the sea in the months of March and April, and in the first fortnight in May.

Do you consider the coble nets destructive of the fry in their progress down the river?—No, I do not consider that they can do any injury to the fry. The meshes of the nets that are an inch and a quarter from knot to knot will not take ashore the fry.

What is the usual size of the meshes of the nets used in the Dee and Don?—An inch and a quarter from knot to knot.

Do you consider that to be large enough?—Yes; when we have been trying to catch fry in order to mark them, in order to see if they come back grilse, we had great difficulty in getting them with the coble nets.

Can you distinguish the salmon of the Don from those of the Dee?—No, I cannot.

You have actually marked a grilse, and have known it to return a salmon?—We have marked fry going down, and have got them that season again as grilse, and in the following season we have got them as salmon.

You know no distinguishing characteristic then between a salmon and a grilse?—None; the proprietors of the Don preserved some grilse in a salt-water pond from the month of September last year to April this year, when I was sent to examine them, and they had lost all the marks of grilses, and had all the marks of a salmon.

Do you consider the grilse to spawn as salmon do?—Yes, I have been in the habit of watching salmon and grilse spawning; last year there were sixteen or seventeen

Mr. William Stephen.

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seventeen pairs; where the grilse and salmon spawned, in the mill, lead close to my house, and I found salmon and grilse as often working together upon the spawning bed, as I did a pair of salmon or a pair of grilse; therefore I think that is a great proof that the grilse is a young salmon.

You have said that coble nets do no injury to the fry?—None.

Do you think they injure the spawning beds of the salmon?—No, I think not; I never saw a spawning bed where a coble net was drawn or could be drawn: the spawning beds are generally found in small tributary streams, or upper parts of rivers, upon shallow fords, where no coble nets are using.

Are there yairs upon the Dee and the Don?—No.

Are there cruives?—Yes, upon the Don.

Do you consider them injurious to salmon fishing?—No.

Are the Saturday's slaps regularly observed?—Yes, regularly observed.

Have you any conservators or water-bailiffs on the Don?—Yes.

How are they paid?—By the proprietors of the fisheries.

There are stake nets upon the north side of the Don?—Yes.

Are those considered to be lawful?—No.

How long have they been established?—About three years.

Has no objection ever been made to them?—Yes, there has; and there is a process now going on.

On what ground do the proprietors of the river fishings object to them?—As being illegal; as no fixtures are allowed at common law, where the tide ebbs and flows.

Do the proprietors of the river fishings consider them injurious to their rights?—Yes, they do consider them injurious to their rights.

Do you so consider them?—I do consider them to be so.

Why do you so consider them?—From their standing so as always to be intercepting the salmon coming along the shores in search of the rivers.

Do they intercept the fry going down?—I do not suppose they do that.

Has the fishing of the Don decreased in any degree since the stake nets were established?—Only a very short time the stake nets have been standing, and as the seasons rule the fisheries a great deal, we can hardly ascertain the effect of them.

Do you consider them likely to injure the fisheries?—I certainly do.

In what mode, and to what degree?—In the manner I have already stated, by intercepting the clean salmon looking for the river, and in the killing of the breeders after the 20th September, when the river is low.

You have no knowledge of any other rivers than the Dee and the Don?—None.

You have stated that you would recommend the fishery of the Dee and the Don to commence on the first of February?—Yes.

Do you make this recommendation at all upon the ground of the value of salmon at that period of the year, from its not being very abundant?—The salmon is valuable and in good condition.

Are there any fish that have not spawned in either of those rivers about the first of February?—No, it is very seldom to be seen, fish unspawned after the first of February.

Are there any fish in either of those rivers in the month of February which have spawned, but which have not yet returned to the sea?—Yes.

What proportion do you think those spent fish might bear to the clean fish in February?—There are not so many; the foul fish always as they spawn go down regularly to the sea, emptying the river.

In fishing in February do you, in point of fact, take many kelts?—I have seen a good number several times.

What do you do with them?—We return them to the river.

Are not the kelts so taken a perquisite of the fishermen?—Not in the Dee and Don.

Do you take as many clean fish in March as in February?—Yes. I have sometimes seen as many clean fish in the month of February as in March, but generally in March they are more numerous than in February.

Is April more or less productive than March?—It is more.

And May?—It is generally increasing.

And what is it in June?—It depends upon the season principally in the river.

And in July?—It is still increasing if there be floods in the river.

And in August?—It is the most plentiful month of any, and the salmon are in good condition, and also the grilse.

And

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And they continue so till the middle of September?—Yes.

And you consider that of the months you would recommend for the fishing season, February is of the least value to you, and that the least number of salmon is then taken?—There is rather the least number.

But the value of what you take in February bears a considerable proportion to that of any other month?—Yes.

Suppose that only six months were allowed for fishing, would not the months of March, April, May, June, July and August be the best six months?—Yes, they would be the months in which most good fish would be taken, but a great number of very good fish would be lost if February were put out.

Why would they be lost?—Because they would ascend the river and would be got in a very bad condition in March, and the months after the opening of the fishing, when they would be very much reduced in quality; they would be hardly fit for coming to the market at all.

The same rule would hold good as to fish that went up in December and January?—They would not be quite so bad in the month of February, because they have not been there so long; those that enter in December would begin to fall off in condition, for if they were to remain longer in the river the salmon would be getting still worse, and would not be fit to be sent to market.

In what period do you conceive that the fish would become unmarketable from remaining in the river?—During two months in the winter season; December and January they would be falling off, but in a very small proportion; but in the summer season, in the course of two or three weeks they would be falling off in a greater degree, as the warm weather comes in, and the river small.

Do you consider the months of February and March the same as the summer months, and that the salmon in those months fall off very rapidly?—In the summer months they fall off more rapidly than in February and March.

Is the weather much warmer in the month of February than in the month of January?—Yes, in some seasons.

Is there not in the rivers Don and Dee, which come from the mountains, a great deal of snow, the water of which comes down in the beginning of March?—Yes, in some seasons.

Will not that contribute to make the water cold?—Yes.

And as cold as in the month of January?—No, the river is not generally so cold in March as in January.

Does the roe of the fish increase more rapidly in warm weather than in cold?—That is a question I can hardly answer. In the early part of the season they are all small, and as the season advances they increase in size.

Is it not the size of the roe that renders the fish more or less valuable?—Yes; and it certainly becomes a larger roe at the end of the season.

As to the salmon that run up in January, February and March, (supposing them to get half up the river,) is it your opinion they would spawn there before they would go down to the sea?—Yes, they would. Allow me to state a few observations upon that question: our cruives upon the Don are so constructed that salmon of ten pounds weight can at all times go up the Don, and none can descend it past the cruives, and we fish regularly in the pool above the cruives, and if the unspawned salmon return again down the river we would undoubtedly catch them there, which never is the case. Salmon is never seen to descend the river but in the spring of the year, when coming down as kelts.

The Committee wish to ask you this question; you have stated that fish going up the river at every period of the year spawn before they return?—Yes.

When do the fish, going up the river in January, spawn?—I suppose they may spawn in November, December and January.

Does not the greatest number of spawning fish go up in the autumn?—The greatest number go up in September and October.

Are not the fish going up in January and February as much charged with roe as in August and September?—Yes, but that is small: it always increases in size as they remain long in the river.

You have stated that you thought stake nets upon the coast to the north of the river Don, were injurious to the river fishery?—Yes.

Should you consider any mode of fishing injurious which added considerably to the general supply of fish in your neighbourhood from reducing the value at the market?—It would be by decreasing the number in the river that I consider the injury would be done to the river proprietors.

And

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And should you have no objection to any mode of fishing that would increase the quantity at the market, provided you caught the same quantity?—No, I should not.

You have stated that the stake nets in the neighbourhood of the Don had been erected only for a short period?—For three years.

And that you were not yet aware to what extent they would injure the river fishery?—That I cannot say; I have very little experience in stake net fishing.

If stake nets intercept fish on their passage to the rivers, must not that be an instantaneous effect, which will be ascertained in one or two years?—As I have stated formerly, the seasons have a great effect, owing to the quantities of salmon that may be taken in the river there, for one cannot say what effect they may have for one or two seasons.

Martis, 10° *die Maii*, 1825.

THOMAS FRANCIS KENNEDY, ESQUIRE,

IN THE CHAIR.

Mr. *James Fisher*, called in; and Examined.

Mr. James Fisher.
10 May, 1825.

WHERE do you reside?—In the neighbourhood of Limerick.

Has there been any salmon fishery within the city of Limerick, or its vicinity?—There has been a considerable salmon fishery a little above Limerick, but the wears were destroyed by a flood about four years ago.

You allude to the destruction of the wear?—I do.

Is there a fishery also in the lower Shannon, or in the estuary?—There are several fisheries upon the lower Shannon.

Has the fishery in the Shannon increased or diminished?—It has very greatly decreased within these few years.

Can you at all state in what proportion it has decreased, either with reference to the diminished quantity or the increased price?—The increased price depends so much upon circumstances, that it would be very hard to judge in that way, and indeed it is difficult to form a decision even in point of quantity; but I believe I am safe in saying that the quantity now taken is not one-fourth of what it was ten years ago.

Before this decrease took place, have you the means of informing the Committee what the value of the fishery at Limerick upon the wear was supposed to be?—I don't know exactly what the rent was, but I presume it was 500*l.* or 600*l.* a year at least.

For some time past has it produced any thing?—Nothing since the destruction by the flood.

In what year did that take place?—I think it was in the winter of 1821-2.

Has the fishery decreased in the upper Shannon in the fresh water stream, or in the estuary, or in both?—In both the upper and lower Shannon very considerably.

To what do you attribute that decrease?—To the illegal system of fishing that has been practised of late years.

What illegal fishing do you refer to, and when was it introduced?—I cannot tell exactly when it was introduced, but it has been adopted for several years, I allude to the killing of fish during the close months, and the destruction of the spawn and of the fry, and also to the erection of what we are given to understand are illegal wears upon the lower Shannon.

What months are considered close times in the Shannon fisheries?—We consider it illegal to kill salmon from the 12th of August to the 1st of February.

Do you consider that from that period the protection is in itself sufficient, or has the destruction of the fish, to which you allude, arisen from that close time not being perfectly kept?—I think that the injury has arisen from that close time not being kept, in addition to the erection of the wears on the lower Shannon, as I have before stated.

What

Mr. James Fisher.

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What is the mode of remedy in case fish are killed on the Shannon during the close time?—There is penalty that attaches of 5*l.* for killing a salmon, and 5*s.* for having the fish in possession.

How is that recoverable?—By a summary process before the magistrate.

Do you conceive that the magistracy of the county have exerted themselves in the administration of the laws respecting fisheries in Ireland?—I think they have not.

Do you think that the destruction of the fish in the close time has proceeded from any imperfection in the law, or from any neglect in the administration of that law?—I consider it to be entirely proceeding from the neglect in the administration of the law.

Do you consider that if the administration of the fishery laws were committed to the constabular force established in Ireland, that there would be a probability of those fisheries being protected which are now poached in the close time?—I think they would have it in their power to do a great deal.

You don't consider that any extension of the period of the close time upon the Shannon fishery is necessary or desirable?—No, I do not; on the contrary, I think the open time might be extended.

How far do you think it could be extended without injury to the fish?—I think it might be very safely extended from the period of the 1st of September to the 1st of February.

Are foul fish openly sold in the market of Limerick during the close time?—They are.

Have you known any exertions made by the magistracy and the market jurors, who are authorized to interfere in the administration of those markets, to suppress the sale of this fish illegally taken?—I have not, further than the fact of some of the magistrates being members of the protecting association to which I belong, but in their capacity of magistrates, I don't know that they ever exercised any influence to stop the sale of fish in the city.

When was that association for the protection of the fisheries established, and what circumstances led to that establishment?—I think it was in 1822 that it was first established. I united with some of the gentlemen who were interested in the thing, and we associated ourselves together for the purpose of protection; and we raised our funds by subscription.

Have you been able to accomplish the object for which you were associated?—By no means as fully as was desirable.

Did you make any calculation as to the loss of fish that took place in the Shannon fishery in consequence of the illegal modes of proceeding which are now adopted in fishing in the river?—I never did make any calculation as to the gross loss; it would be so enormous as to be almost beyond the reach of figures, if I were to take in the whole river, and all its tributary streams.

But you made some calculation?—No, I don't think I did.

The destruction of the fry in the upper water of the Shannon comes within your observation and knowledge?—It has come within my knowledge, but not within my own observation.

Have the kindness to explain how that destruction takes place?—By the taking of the fry in nets in very large quantities; so much so, that I have been told that the fishermen in and about Killaloe have frequently fed their pigs upon them.

Having stated that the association of which you are a member have not been able to attain fully the object for which they united, have the kindness to explain the difficulties which have impeded them?—One of the leading difficulties was the want of means. We found we could not get money enough by private subscription to carry the object fully into effect; and even if we had succeeded in possessing greater resources, we should have found it very difficult to exercise our functions over the extensive waters of the Shannon, and over the tributary streams.

Is there not an exclusive right of fishing claimed by the corporation of Limerick in the Great Lax wear?—Yes, I understand there is.

Did you obtain any assistance from that body for the protection of the fishery?—Nothing more than that the mayor and some of the members of the corporation being members of our committee, and a few of them subscribing to our funds.

You have spoken of the destruction of the fish by illegal fisheries in the lower Shannon, be so good as describe what those illegal fisheries are?—I never saw any of them, but they are described to me to be wears formed by posts and network, running out from the shore in the Shannon, in which are fixed traps, by which the salmon are taken.

Mr. James Fisher. 10 May, 1825.

Is not the Shannon in point of fact a navigable tide river, or rather a very great estuary in those parts, in which those wears have been erected?—It is a very great tide river.

When were those wears first erected; when was that mode of fishing first introduced?—I cannot tell the first year, but I should suppose it was ten or twelve years ago.

Was it introduced by a Scotch gentleman of the name of Halliday?—I understand it was.

Upon what do you ground your opinion that that mode of fishing is illegal?—For two reasons: the one is, that there was a trial had by the renter of the Lax wear against Halliday for the erection of such wears, in which he obtained a verdict; the other is, that I have seen a copy of the late attorney-general Saurin's opinion, pronouncing them illegal.

You don't believe that those wears have ever been known in the fisheries in Ireland till introduced about that period?—I presume not.

You are aware that the principle upon which they are declared to be illegal was in reference to an Act of the 10th of Charles I. which recites "the great hurt and "daily inconvenience which ensue to the King's subjects by the greedy appetite "and insatiable desire of sundry among them in destroying salmon"?—I don't remember that particular Act of Parliament at this moment.

Upon what principle do you conceive that the wears in the lower Shannon have contributed to the destruction of the breed of fish in the river?—I don't know that it is to the destruction of the breed of fish; but I have been told by experienced people in fisheries, that the obstruction of fish before they come into the fresh water streams makes them return to the sea and shoals, and that they don't run as freely into the fresh water as if unmolested till they get into the streams.

Do you know how far these wears project into the tide-way?—I understand they go from the height of the high water beyond the low water mark.

What is the average width of the channel in those parts of the river where those wears are erected, at low water in the lower Shannon?—I have been very little down the Shannon, but I should guess a mile or more.

What distance do you suppose there is between the commencement of one of those wears at high water mark down to the space within the low water mark where they terminate?—Never having seen them, I can only speak from hearsay, but I should suppose a couple of hundred yards. There are porpoises in those parts of the river, and the salmon keep the shore in consequence.

Do you consider that these wears in the lower Shannon, upon the whole, have done more than alter the place in which fish have been taken, rather than contribute to the destruction of the breed of the fish themselves, or to the loss of the fishery upon the whole of the river taken together?—My opinion would be, that they can do no more if they are fished only in season.

Is there not a difficulty in determining the periods of close time with regard to these wears, which are removed frequently out of the reach of magisterial inspection, and which are the property of poor fishermen?—I should think so, certainly.

Do you know, from the size of the net and the mode of constructing these wears, whether any of the salmon fry or young fish are ever taken in them?—Very little, if any; I never heard of fry being taken, but trout has been taken.

You have stated that there were proceedings taken in courts of law which determined the illegality of those wears; have those wears been abated on the river in consequence of those proceedings?—No; I apprehend they have rather increased since that.

Have any other proceedings been taken than those proceedings in the court of law, for the purpose of abating these wears?—Yes, there were some other proceedings taken.

Have the kindness to state what they were?—Mr. Kelly, the fishery inspector, by the advice of some persons who were desirous of having these wears taken down, under the authority of a warrant from the city magistrates, proceeded down the river with a party of police, and destroyed a number of those wears.

At what distance from the city of Limerick was the destruction of those wears carried into effect?—He went as far as twenty or thirty miles down.

Were those wears the property of poor fishermen?—I understand many of them were.

Did they not thereby suffer considerable loss?—They must, I presume.

Mr. James Fisher. 16 May, 1825.

Is the Committee to understand that a magistrate gave a warrant to the police to destroy the property of any class of the King's subjects without any legal conviction authorizing it to take such proceedings?—No; the warrant, if I recollect right, was to bring before them all illegal instruments for taking fish, and all fish that might have been so taken.

And under the colour of that warrant the destruction of the wears took place?—Under the colour of that warrant, and apprehending that he had the law with him.

Were the exertions of these police, under the authority of the corporate magistrates of Limerick, in all cases successful, or did they meet with any resistance as to the destruction of the wears?—No, they were not.

State in what case they were not successful, and what circumstances led to their failure?—Kelly, the inspector, told me, that after they had taken several wears they came to Mr. Leslie's, and Kelly said that before they got to the shore they found an array of yeomanry to meet them, who levelled their muskets at them, so that they were apprehensive of being fired upon.

Were not these operations of Mr. Kelly and the police commenced at a very early hour in the morning, almost before day-light, and continued also without the knowledge of the individuals whose property was destroyed in the first part of their operations?—I don't know at what hour they commenced; but Kelly told me that in most, if not in all the cases in which he destroyed the wears, he went on shore and made inquiry whose property the wear was, and he could get no one to acknowledge whom it belonged to, except in the case of Mr. Hodges and Mr. Leslie.

Have you not reason to know that the chief magistrate of police, whose constables were employed in this predatory expedition against the fishermen, highly disapproved of the proceeding that then took place; and in point of fact, the police was so employed without his knowledge or approbation?—I have reason to believe it.

Do you conceive that this mode of determining questions of civil right with reference to fisheries in Ireland is one productive of the most serious and evil consequences, as affecting the tranquillity of the country?—I cannot approve of it; I do think that any such proceedings would be likely to lead to the injury of the tranquillity of the country.

Have you known proceedings of a similar character taken in the upper waters of the Shannon, between Limerick and Killaloe, in which the claimants to the right of civil fisheries have adopted the mode of trying their right, by firing upon individuals who claimed the right of fishing in those waters?—I understand there was such a case, where the renter of the fishery fired upon persons fishing upon what he considered his waters.

You have alluded to the appointment of a person as inspector of the fisheries; under what authority has he been appointed, and what are the duties which are cast upon him by such appointment?—Under the authority of an Act of Parliament of the 23d and 24th of George III. I think confirmed by the 26th, which empowers persons residing on the banks of the river to appoint an inspector.

Are those any persons residing there, or are they those having the right of fishing upon those streams?—I believe it is any person residing and possessing a certain qualification in property.

Is there any salary attached to such appointment?—None.

Do you conceive that such appointment is likely to be effectual for the purpose intended, namely, the protection of the breed of salmon, without the provision of a salary for the remuneration of the officer employed?—By no means.

How would you propose that that Act should be amended with a view to render it more efficient for its intended purposes?—I would recommend to have an inspector for each province, who should have under him a number of constables in each county, these officers having salaries, and being presented for by the grand jurors by a county rate.

Is there not a mode of fishing upon the Shannon which is called groping, which is destructive of the breed of the fish?—There is.

Explain what it is?—It is practised when the fish are about, or after depositing their spawn, when they are sick and weak; they then lie in the shallow waters near the banks of the river, and it is the practice to grope for them with hooks at the end of long poles, by which they frequently take the fish, and in taking them disturb the spawn.

Is there a mode of fishing also practised in the Shannon by torch light?—There is.

Mr. James Fisher.

10 May, 1825.

Do you consider that the improvements in our fisheries in Ireland chiefly depend upon any necessary improvements in the law itself, or a more rigid enforcement of the law already existing?—I think that if an arrangement were made for inspectors and constables to carry the present law into effect, it would not require much alteration.

By what regulations should you propose to protect the spawn?—By a legal enactment, or carrying into effect the present law through the medium of the officer or officers.

Is there not supposed to be a considerable distinction between the period which ought to be the close time in some of our rivers, compared with others?—I apprehend there is.

With regard to Cork, comparing the fishery there with the fishery upon the Shannon, in what respect does that distinction exist?—I apprehend that salmon is in season almost the whole year round in Cork, and does not require the same close time as in the Shannon, or other parts in Ireland.

But although in the river at Cork there may be clean fish taken for a considerable portion of the year, do you not think that the taking of such clean fish at particular periods is connected with the destruction of the spawning fish?—I think if they are taken by nets or wears, that in taking them during the breeding season it would be hardly possible to avoid taking those out of season.

Then in such cases as you allude to, do you consider it advisable to enforce rigidly the periods of close time?—I think if the people interested in the fisheries in Cork can prove what I am informed is the case with respect to the run of the fish in their river, it might be safe to shorten the close time there.

But upon the whole, do you not conceive that it might be more desirable to establish one general system for the entire country, than to permit variations, or causing peculiar cases to be made out for particular fisheries?—I don't doubt but it would; I think it would.

Can you conceive any more direct manner of improving the condition and the comforts of the peasantry of Ireland than giving them a greater abundance of the supply of fish, from their habits of life?—I think it would lead to promote employment, and tend to increase their comforts.

Have any circumstances occurred which, in your mind, have led to the destruction of salmon fry which takes place in the upper Shannon; have any circumstances occurred in the city of Limerick which have led to the destruction of the salmon fry above it?—Yes. The lower orders of people at Limerick are in the habit of taking eel fry in large quantities, and the eel breed being a considerable source of employment and emolument to the people at Killaloe, about twelve miles above Limerick, revenge themselves by killing the salmon fry.

In the spawning beds?—No; they take the fry in immense quantities in small nets.

In coble nets?—In what we call eel fry nets, with small meshes.

Has any destruction of the fish taken place, do you conceive, in the wears of mills in your neighbourhood?—Not much that I am aware of at all.

Is there any anxiety felt in Ireland with regard to any legislative interference with respect to the wears of mills as regards fishing?—There is considerable apprehension about a clause in the bill that is printed requiring gratings to be placed above and below our water mills, which would materially injure mills particularly circumstanced.

Do you know of any illegal fishery carrying on in the mill wears, or by the proprietors of mills, connected with their establishment?—I do'nt know of any in my neighbourhood.

With respect to the great wear of the Shannon, the property of the corporation of Limerick, are they not compelled by law to leave the greater portion of it open so as to all the running of fish?—They are required by law, I believe, to keep three gaps or openings.

Do you know whether they in point of fact did leave these gaps open; and if not, whether any proceedings were taken to compel them to leave them open?—There was a proceeding taken against them a few years ago, in consequence of not leaving them open, in which a verdict was had against the renter of the wear.

Have the goodness to distinguish between the wear in the upper Shannon and those standing as you describe below; does the wear in the upper Shannon run nearly across the river?—It did, before its destruction, run nearly across.

Are

Mr. James Fisher.

10 May, 1825.

Are you aware that after the corporation were compelled to leave a certain opening or gap free, that they placed an object in that opening or gap to prevent the fish running in?—I am aware that they or the tenants did so. They placed something like a small crocodile.

Describe the object that was so placed?—It was something in the shape of a crocodile or of an alligator, painted with very glaring colours so as to frighten the salmon.

Having stated that the destruction of the eel fry in Limerick has led to the destruction of the salmon fry above, do you know of any pains being taken by the magistracy to prevent the destruction of the eel fry?—I never knew any pains taken till the appointment of Mr. Kelly, the inspector, who has been very executive.

Have his efforts been seconded by the magistracy?—They have, in some degree.

Will you inform the Committee whether it be your opinion, that if the breed of salmon in the Shannon generally were protected, the spawn protected, and the fry, that very valuable salmon fisheries would exist in that river?—I believe there would.

Do you therefore consider that it is an object well worthy of attention to promote the prosperity of those fisheries?—I do, very decidedly.

Do you think that a very important object is to protect the parent fish before it has spawned?—I do.

The Committee think you have stated, that the close time you would recommend should extend from the 1st of September to the 1st of February?—Yes.

Will you be so good as state whether any unspawned fish appear in the Shannon after the 1st of February?—I think not; I don't know of any.

Do any fish appear in the Shannon after the 1st of February which have spawned, but which have not then returned to the sea?—They do.

What becomes of those fish when the good fish are taken during that month?—We call them slats; they are frequently taken.

What use is made of them?—They are eaten by the poor people.

Can you state what proportion the number of those slats, during the month of February, may bear to the clean wholesome fish taken during that month?—I cannot state the comparative number, but I should suppose they are considerably greater than the number of clean fish under the present system.

Do you consider it advisable, under those circumstances, that the fishing season should commence so early as the 1st of February?—I won't pretend to say that it might be extended with benefit to the 1st of March.

Do you believe that those slats, if not taken, would return to the sea, and there become healthy fish?—I do believe they would.

Would they not there either be taken in the following season as wholesome fish, or become breeders for the ensuing year?—I agree they would.

Do you think that the abstaining from taking those slats would considerably tend to the multiplication of salmon in the river?—I don't know that it would very materially, because they are so prolific an animal that the great destruction or the great injury arises from the taking of fish before it spawns, or the destruction of the spawn itself.

Is it not evident that unwholesome fish are taken, as you have stated, which would become wholesome if allowed to return to the sea?—Yes.

Consequently what is now taken as bad food, would become valuable and wholesome food?—Certainly.

Mercurii, 11° *die Maii*, 1825.

THOMAS FRANCIS KENNEDY, ESQUIRE,

IN THE CHAIR.

Thomas Telford, Esquire, called in; and Examined.

Thomas Telford, Esq. 11 May, 1825.

HAVE you examined the clause in a bill, now depending in Parliament, for "the more effectual preservation and increase of the breed of Salmon throughout "Great Britain and Ireland," which provides for the placing of fenders or gratings upon mill streams?—I have.

Does your great experience enable you to say whether the provisions of that clause may be carried into effect for the purposes therein set forth, without injury or inconvenience to parties interested in mills and manufactories?—I am of opinion, that if judiciously constructed, they might; it depends, in some measure, upon the width of the openings that are required between the bars or gratings: if that can be stated, which would be necessary, I can then speak more precisely upon the subject.

Should you think, if the openings were an inch and a half to two inches between each bar, and such bars not to exceed half an inch, the bars to be made of iron, that fenders constructed upon those dimensions might be applied without injury?—I think they might.

Whether should you think that the bars ought to be placed in an horizontal or vertical position?—I should prefer them in a vertical position.

Will you state to the Committee the reasons for that preference?—Because I think they would be less liable to be obstructed by weeds, and less liable to create a fall in the water in passing.

Do you think that a fender, taken as a whole, ought to be placed in a vertical position, or to be sloped at all?—I think a vertical position is as good as any, although if it were sloped with the top up the stream, it might be desirable. Next to a vertical position, I should prefer its being sloped up the stream; but I conceive there would be a little advantage attained by that.

In what position should you think it would be most easy to keep such fender clean from weeds?—I think a small inclination up the stream would be advisable, because any thing in that case would have a tendency to slip down the bar.

And do you think that any difficulty might arise in cleaning such fender, if inclined up the stream?—It would be less easy to be cleaned.

Therefore, upon the whole, should you be inclined to recommend, as the best construction, a vertical position for such fender?—I should.

Is it your opinion that the force of water, as applied to machinery, would be in any material degree diminished by such fender or grating being interposed between the body of the stream and the mill or manufactory?—Not if a sufficient quantity of open space were left between the bars, as it would be only increasing the total width of the mouth or entry to admit the passage of a sufficient body of water, and more than could be obstructed by upright bars.

Do you conceive, therefore, that whatever space is occupied by such bars, may be compensated by an additional width to the total breadth of the stream?—I do; I have no hesitation in thinking so.

Such compensation, the Committee presume, would be necessary only where the water was scarce, and not more than equal to its purpose; that is to say, where not more was admitted into the mill stream than was necessary for turning the machinery?—The head and water would remain the same; and as the power of the wheel depends upon the height of head and quantity of water it would likewise remain the same.

Is it your opinion that the velocity with which the water runs towards a mill is of consequence in estimating the force on the wheel when it arrives at it?—It is some; but Mr. Smeaton's experiments upon mills prove that the momentum or useful effect is more dependent upon absolute weight when it arrives at the mills.

Will you be so good as to state your views generally as to the means by which such fenders or gratings may be applied so as not to deprive mills or manufactories either of the quantity of water, or of the power with which the water is brought to

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act upon them?—As far as I at present understand the matter, I conceive it only necessary to preserve a sufficient quantity of unobstructed space to permit the same quantity of water to flow that does in the open channel; consequently, the same quantity would pass with the same velocity as it did previous to the grating being placed.

In order to follow out your recommendation, must not a space be given, of additional width to the watercourse, more than equal to the total width of the bars interposed?—Certainly; I should at least recommend the same principle as I do in regard to piers of bridges, which is a similar case, but upon a larger scale, where it is generally recommended to be double.

Is it therefore your decided opinion, if a space equal to double the total space occupied by the bars, be added to the width of the stream, that no mill or manufactory can suffer from such grating being interposed?—I am of that opinion, certainly.

Do you think it desirable that such grating should be constructed of iron bars, with their narrowest side presented to the stream?—Certainly.

So that while the sides so presented should not exceed half an inch, the depth might be an inch or more, without inconvenience?—Certainly; I would prefer it, upon the whole, of a lozenge shape, pointing in the line of the current.

Would you apply the same principle to the grating placed at the lower extremity of the stream?—Certainly I would.

Is it your opinion, that in the one case as in the other, if these regulations be observed no inconvenience can be suffered?—I think it cannot.

I request permission to add, that in cases where additional width, necessary to compensate the space occupied by the bars of the gratings cannot be obtained, the additional space may be acquired by deepening the channel where the gratings are placed, still preserving the upper surface of the water at the same level.

The Reverend Dr. *John Fleming*, called in; and Examined on the following Heads:

1.—Opportunities of Information.

Rev. Dr. John Fleming.

WHERE do you reside?—At Flisk, in the county of Fife.

Are you the minister of the parish of Flisk?—I am.

Be so good as state to the Committee the position of your place of residence with reference to the sea or river?—It is situated on the south bank of the estuary of the Tay, about 300 yards from the shore; about eighteen miles from the open sea, and about nine miles from the junction of the rivers Tay and Earne, at the head of the estuary.

Is it the fact that you have been in the habit, for many years, of examining the shores and sand banks, and the pools left by the tide in the estuary; if so, for what purpose have you made such examinations?—I have examined, with considerable care, the pools and sand banks of the estuary of the Tay, chiefly with the view of collecting the animals and vegetables of that estuary, and investigating their characters.

Are there salmon fisheries in the neighbourhood of your residence?—There are.

What is the mode of fishing practised at those stations?—The coble-net made of fishing.

Were stake nets ever used in your parish?—I believe not.

Have you been in the habit of visiting the fishing stations within your reach frequently?—I have.

If so, can you state to the Committee any particular object that you had in view?—I am in the habit of visiting frequently those fishing stations with the view of ascertaining the different kinds of fish which are caught, and I am likewise in the habit of engaging the fishermen at those stations to collect for me, and bring to me all the strange fish they catch.

Do you consider that in this way you have acquired a general knowledge of the fish which frequent the frith of Tay?—I should think so.

How long have you been minister of the parish of Flisk?—Since the month of April 1811.

Have you since that time attended particularly to the fisheries on the Tay?—I have.

Did

Rev. Dr. John Fleming.

11 May, 1285.

Did you reside in Shetland for some years before you became minister of Flisk?—I did; I was minister of Bressay upwards of two years.

Were you induced to attend to the fisheries on the Tay for the purposes of natural history only, or had you any other object in view?—In a great measure for purposes of natural history; but I was likewise induced to pay attention to the fisheries in that estuary in consequence of the very deep interest which was excited at the period of the litigations concerning the stake-net mode of fishing.

Did you attend to the study and history of fish previous to being settled as minister of Flisk?—I did.

For how long a period antecedent to your settlement?—For seven or eight years previous to my settlement at Flisk. I attended to the natural history of fish when I was a student at Edinburgh College, and examined all the specimens which I could procure illustrative of the Ichthyology of the Forth.

Have you published treatises relating exclusively to the character of fish?—At the request of Dr. Brewster I wrote an article intituled *Ichthyology* for the *Edinburgh Encyclopedia.*

Did you, in that article, give any opinion with regard to the salmon-fishery laws; and if so, be so good as state what that opinion was?—I represented, in general terms, that the present laws regulating the salmon fisheries had not been founded upon a minute attention to the habits of the salmon.

Have you also published a general work upon *Zoology?*—I have published a work termed "*The Philosophy of Zoology,*" in two volumes octavo.

What is the object of that work?—It has for its object to give a detailed account of the structure of animals; of the methods of classifying animals; and of the laws which regulate the habits of animals.

Then is the Committee to understand that you have attended to the study of animals generally, as well as to fishes?—I have attended to the study of animals generally from a very early period of my life.

Are you in any way personally interested in the salmon fishery?—I am in no way personally interested.

You have no fishery belonging to you, nor are you the lessee of any fishery?—No.

Have you any friends or relatives personally interested in the salmon fisheries?—I have none.

Then the Committee are to understand that it is solely as a naturalist, and as a disinterested individual, possessing favourable means of information, that you have attended to the salmon fishery?—Yes.

2.—Natural History.

How many species of the *genus salmo* of *Linnæus* have you ascertained to inhabit or frequent the estuary of the Tay; be so good as enumerate them?—In the estuary of the Tay I have had an opportunity of examining the following species, which are seven in number:—first, the *salmo salar*, or the common salmon; second, the *salmo hucho*, which I presume to be the *bull trout* of the fishermen; third, the *salmo eriox*, the *gray* or *shewn*; fourth, the *salmo trutta*, or common *sea trout*; fifth, the *salmo albus*, the *whiteling* or *finnock*; sixth, the *salmo fario*, or *common river trout*; and seventh, the *salmo eperlanus*, the *spirlin* or *smelt*.

In this answer you have referred solely to the estuary of the Tay?—Solely to the estuary of the Tay.

Have you any observation to make respecting the species of salmon in the upper parts of that river, or lakes connected therewith?—The char frequents the lakes in the higher parts of the Tay, but they do not visit the sea. There may be other species besides those which I have enumerated.

In the enumeration of the species you have not included the grilse; do you consider that the grilse is not a species distinct from those you have mentioned?—I have not ennmerated the grilse as a species, because I consider it as a young salmon.

Is not the grilse different in form from the common salmon?—The difference is inconsiderable.

Has it melt and roe, and does it spawn as a salmon?—Yes.

Do you not consider that these facts indicate the grilse as being a different species?—I don't.

State to the Committee the grounds of your opinion?—Fish are well known to breed long before they have arrived at maturity, and as a proof that they do, it

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may be stated, that at the end of the season the salmon caught in a state fit for spawning are by no means all of the same size; if, then, we are to take size as an index of age, we must arrive at the conclusion that salmon spawn at different ages, and before they have reached their full size. I know, likewise, in reference to another species of the genus which I have enumerated, the spirlin for instance, that it breeds before it has reached its full size. I have taken a young spirlin, not two inches in length, full of roe, evidently ready or nearly ready for exclusion, along with full grown spirlins about six inches in length.

Is it a fact that grilses make their appearance in the beginning of summer, and that they are of a small size when they first appear, and go on increasing as the season advances?—It is a fact, I believe.

Are you aware that experienced fishermen have stated, that there are some rivers in which great numbers of grilses are found where there are few salmon; and does not that fact, if true, tend to the conclusion that grilses and salmon are not of the same species?—Even admitting the fact, I would not be disposed to admit such a conclusion to be drawn from it. It appears that the grilses make their appearance at a particular period, and that they increase both in numbers and size towards the close of the season: it depends, therefore, upon the particular period of the year during which the river is fished, whether you find the proportion of salmon to the grilses greatest, or the proportion of the grilses to the salmon; for example, if you begin fishing the river in the months of April and May you shall find but few grilses, if any; if you begin fishing at a season when the grilses are most abundant, you will, in such a river, have few salmon and very many grilses. I consider that the following circumstance confirms my opinion that grilses are young salmon; they are not found at the commencement of the grilse season otherwise than small; as the season advances they increase in size. If they were a distinct species we ought to find many of them in the following year of the same size, at least as those found at the close of the former season. Thus we ought to find at the commencement of the grilse season, the old grilses of nine pounds or ten pounds, whereas we only find them of a pound and a half to two pounds weight.

Did you ever see a young salmon of two pounds weight?—I am not aware tha I have done so.

Except under the character of grilse?—Yes.

A female grilse has roe or inceptive *ova?*—Decidedly.

But has the male grilse ever a melt?—Yes.

Are not grilses always found where salmon are?—I am not aware of any facts to the contrary.

Are they not liable to the same disorders as salmon are, such as the *sea-louse?*—I should think they are; but in reference to the *sea-louse,* that is no proof of species. It is found on the cod and whiting, and other fish.

Did you ever see the *spawn* of *grilse?*—I have not seen the *spawn.*

Do you think salmon pair?—I do.

What age do you suppose a grilse to be?—I am not prepared to answer that question.

At what size do they cease to be called grilse?—I don't know.

What are the distinguishing characteristics of the *salmo hucho?*—Generally in the external character; it is of a more lengthened form than the salmon, and it has other minute characters connected with structure which indicate it to be a distinct species.

Is the whiteling or *salmo albus* common in the Tay?—It is not common in the estuary of the Tay, but it abounds during the harvest months, especially in the river connected with the estuary.

What are your reasons for believing that the whiteling is a distinct species from the common salmon?—In its form and structure it differs from the common salmon.

Does it also differ from the grilse of the same size?—Decidedly different.

In the anatomy of it, or in its outward appearance?—I mean in the structure of the fins, in the scales, and the general shape of the fish; it differs in the size of the scales in proportion to the body.

Is it a fact the whiteling is to be found coming up from the sea full of *ova?*—It is a fact, and I speak from having examined their organs of reproduction.

Is the *salmo eriox* a species common to the Tay, and does it not very much resemble the common sea trout, or *salmo trutta?*—It is not a common species in the Tay; it bears a very close resemblance to the sea trout, but may at all times

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be distinguished from it by having larger spots, by being thicker in the body immediately above the tail, and by the rays in the gill-flaps differing in number; it differs also in the period of its migration, seldom arriving in the Tay before the beginning of August.

Is *salmo trutta* caught in great numbers in the Tay, and are there not several varieties in this species of fish?—It is common in the Tay. It appears to be a species exhibiting considerable variety of colours. In some of the individuals you find the palate black or dark coloured, and in such the flesh is invariably reddish; in others with a pale palate you find the flesh white, and such are not so highly esteemed as food.

Is the common river trout ever found in the estuary of the Tay?—It is occasionally found in the estuary of the Tay, but never except after floods.

Is the spirlin or smelt common in the Tay; and what is the season and mode in which it is caught?—The spirlin is common in the Tay; the fishery commences about November and continues until May, the nets being always placed in the water during spring tides, and generally discontinued during neaps. The mode of fishing is by a trumpet-shaped net, with its mouth pointing up the river, and placed at low water, supported by upright stakes; in the month of November, and for some months afterwards, the fish is in good condition; it spawns in April and May, at which season the fishing is discontinued.

Have you had peculiar opportunities of observing the spirlin nets, and the fish caught in them?—I have visited the spirlin nets frequently, and I have had many opportunities of witnessing all the fishes of different kinds caught in those nets. Shrimps I have seen; the fry of herring in great abundance, at particular seasons of the year; the fry of the coal fish; the fry of the cod; and, early in the season, or in the beginning of the spirlin season, very minute spirlins likewise.

Do those spirlin nets take salmon fry?—I don't think they do; at least, not those in my neighbourhood, which I have inspected.

Are not those nets placed in the river during the season when salmon fry are descending to the sea?—They certainly are in operation at that season during which salmon fry are descending, and they are placed as near the low-water mark in spring tides as possible; they are so small in the meshes as to be fit to intercept any kind of fry, yet no salmon fry have ever been found in them to my knowledge, and according to the report of the oldest and most experienced spirlin fishers of the neighbourhood.

Has any complaint ever been made, to your knowledge, as to spirlin nets, by persons interested in salmon fisheries?—Not to my knowledge.

In what way do you account for the salmon fry escaping those nets placed at low-water mark at spring tides?—Certainly, because the salmon fry do not approach those stations in which the spirlin nets are placed.

Do you consider that the salmon fry confine themselves to any portion of the estuary, so that they don't approach those nets, or in what way do you account for it?—I think they confine themselves to the mid channel: I have established that circumstance from the examination of the pools left in the neighbourhood, between the spirlin nets at the low water of spring tides and the shore, and the inspection of the nets themselves. The fry of the salmon, in descending, do not move downwards in that space between the low water at spring tides and the beach; consequently they must move in the middle of the channel; otherwise, were they in the habit of diverging from the channel they would necessarily be caught in the spirlin nets.

3.—Habits of the Salmon.

Do you consider the salmon to be a sea fish or a river fish?—I consider the salmon to be a sea fish.

Is it a fact, that salmon which enter a river for the purpose of spawning make great exertions, and overcome many difficulties in their progress to their spawning ground?—It is certainly a fact that they do make great exertions, as is apparent in their efforts to leap over mill dams and barriers in the rivers.

At what season do they make those exertions to ascend the rivers?—Those exertions seem to be made chiefly, if not exclusively, when the fish is pushing up towards the spawning ground.

Do all salmon spawn at the same season?—I don't think they do.

Is it a fact, that there is a common season during which the greatest number of salmon are in a state for spawning; if so, be so good as state the common season

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when the fish become full of melt and roe, and the common season when the melt and roe are discharged and deposited?—The salmon appear full of roe in the months of August, September and October, while November, December and January appear to be the months during which the spawn is deposited; individuals, however, may be found, during other months, full of spawn, and may actually spawn in other months than those now mentioned.

Does this statement apply to the Tay, or to other rivers with which you are acquainted?—This statement applies in a more particular manner to the Tay, but I should be inclined to think that it may apply generally to the rivers of Scotland.

Do salmon remain long in fresh water after having found their way to it, before they spawn?—They seem to remain several months; they have, in many cases, to travel to nearly the sources of the rivers; they have to find out a proper place to deposit their spawn, and the act of spawning occupies some time; so that it seems to be necessary that they should reside or be in the fresh water of the rivers some months before the actual spawning season.

Do you consider that the salmon which enter the rivers earliest are those which spawn the earliest?—I should think so.

Do you think that the salmon retreat to the sea directly after spawning?—Not directly after spawning, otherwise the kelts ought to be found descending in the months of November, December and January, whereas they are found descending much later in the spring, sometimes so late as the month of May. The period of the descent of the kelts does not correspond with the period of the deposition of the spawn.

Do you believe that the fish always return to the same rivers?—Generally speaking, they may perhaps endeavour to return; but there are many circumstances to derange their course, so as in fact to render it nearly impossible that they should return to the same river.

But if they live, they are most likely to return to the river in which they were bred?—Yes, if they live, and if they be not deranged in their movements; conditions not likely ever to occur.

Does your experience enable you to state whether the season of spawning varies considerably in the different rivers of the kingdom?—I could not answer that question by my own experience.

Have you any knowledge of the number of *ova* in the roe of a salmon?—I have never counted the *ova* myself, and I should think it would be difficult to assign any definite number of *ova*, the number differing according to the size of an animal and its condition, so that what may be true in a small fish may not be true in a large one, and there may likewise be some individual differences.

Can you state the probable number in a well-grown salmon?—Not having counted them myself, I cannot state positively; but I have no hesitation in believing the testimony of experienced fishermen who have counted them, and who have said there are 17,000 or 18,000.

And yet they deposit these eggs one by one, do they?—They must be excluded one by one.

Have you any idea of the time that it occupies a salmon to deposit its *ova*?—I have not had any opportunity of observing the time, but credible witnesses seem to state that it occupies many days.

In what places do the salmon spawn?—Generally in shallow fords, with a gravelly bottom.

In fact may it not be said to be always within the reach almost of destruction?—I should think so.

Do both the male and female engage in the operation of spawning?—They do.

And how is the spawn deposited?—I have seen the operation going on, but so imperfectly that I could not take upon myself to describe it minutely; I am however quite convinced that the description that was given by the witnesses examined last year, Mr. Halliday and Mr. Little, is accurate in all its particulars.

You have said that your opinion was that salmon pair; but if the male salmon be killed, would not another male salmon immediately throw its melt over the spawn of the female?—It is well known to poachers, that if in the act of spawning they destroy the male fish, the female fish leaves the bed, and in the deep pools endeavours to find another mate. In that way, poachers, by attending to the operation of one female, may succeed in capturing many males, leaving the female fish undestroyed.

Are you aware that it has been stated that the mouth of the male fish is turned

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up into the form of a hook in the operation of depositing the spawn; the male fish, according to the common statement, digging the furrow for the spawn; do you think that statement is correct, or in what do you differ from that statement?—It is not the mouth of the male, but the under jaw of the male that is so turned up; and it appears to be a natural distinguishing mark of the sex, and not produced by any mechanical means. Were it produced, as has been supposed, by the male fish digging a furrow for the spawn, then we should expect to find young male salmon, previous to their having been engaged in this operation, with the lower jaw longer than the upper, which is not the fact; and I am of opinion, that if the male fish were engaged in such a manner in the act of digging the gravel, its mouth would be filled with the small stones.

Do the male and the female fish deposit their roe and melt in the same furrow at the same time?—I believe they do, simultaneously.

How long do the eggs remain in the gravel before the young fish arise?—Three or four months.

At what time do the fry begin to appear swimming in the rivers; how long after spawning?—The fry make their appearance in the rivers in the months of March, April and May, and they may be found in smaller quantities in the months of June and July; indeed it is probable that fry may be found during all the summer months, as individual fish seem to spawn at seasons different from the common spawning season of the species.

Do they then, when found in the rivers, descend and go out into the sea?—They do.

In descending the river, do the fry come down the middle or the margin of the stream?—In descending the river (properly so called), or previous to reaching the tide-way, they keep the margin of the stream, and apparently because the margin is the easy water, and consequently best fitted for their young and weak state; when they reach the estuary or tide-way, then the margin of the water being there most disturbed, the fry avoid the margin and betake themselves to the deepest parts of the channel, disappear from observation and capture, and so go out to sea.

Are those facts founded upon your own observation?—They are founded upon the following observations: If they ever leave the mid channel or the deep water, and approach the margin of the estuary, they must have been caught in the spirlin nets, in which they are *not* caught, and they must have been occasionally left in pools upon the banks of the estuary, in which pools I know from observation they don't occur.

Is the Committee to understand, from the opportunities you have had, and the observations you have made, that you must have seen the salmon fry if they had frequented the banks of the estuary, or left the mid channel, and that you never, in any instance, found them upon the margin?—I think my opportunities have been sufficiently favourable for making acurate observations upon the subject, and qualify me for stating that they are not found in those situations.

Then you wish the Committee to understand that you, as a naturalist, consider it as an ascertained fact, that the salmon fry never seek the banks or shallows of the estuary, but confine themselves to the mid channel, where there is deep and still water?—I do think that fact in their history is ascertained.

When do the kelts, or spent fish, come down the river?—During the spring months, or in February, March, April and May.

Have you any ground upon which to state the period which intervenes between the depositing of the spawn, and the coming down of the parent fish?—I have reason to think that two or three months may elapse between the deposition of the spawn and the descent of the spawned fish; an opinion founded upon the circumstance, that the kelts generally descend a considerable time after the spawning season.

This season is, of course, influenced by the circumstance of there being, or not being sufficient water in the river to enable them to descend?—It may depend upon several circumstances: the degree of strength of a fish to undertake such migration, and the condition of the river, in regard to the quantity of water, being favourable or unfavourable to the progress of the spent fish.

But, in point of fact, a considerable period does intervene between the spawning season and the river being cleared of the spent fish?—It is certainly so.

Do you know what course is taken by kelts or spent fish in their progress down to the sea, after they come within the influence of the tides, do they in general

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keep to the mid channel, and in deep water?—I believe that they pursue in the estuary a course precisely similar to the fry; namely, that they keep in the deep water.

Then you do consider that there is this distinction between the spent and clean fish, that the one keeps the deep water, and the other roams at large throughout the shallow and deep water?—I should consider that it is demonstrated that they pursue that course, from the circumstance that where clean fish are captured in the estuary, kelts are not captured; and that if kelts left the deep channel, and roamed about upon the banks, they would necessarily be as easily captured as any clean fish.

Is it your opinion, that the tide has a considerable effect upon the motions of the fish when in a weak state?—I should think so; and I should be inclined to assign that as the reason why the fry betake themselves to the deepest parts of the channel, where they are most protected from the agitation of the water; and I would assign a similar reason for the kelts, which are in a state comparatively weak, as well as the fry, betaking themselves to the same protecting stations.

Does this influence of the tide affect the motions of the fish, both by assisting it in its progress when in the tide of the mid channel, and by preventing the weak fish from frequenting the shallows, where there is a considerable agitation?—The circumstance of the fry and the kelts betaking themselves to the deepest parts of the channel enables them to resist the deranging motion of the flood tide, and to take advantage of the ebb tide in accelerating their migration towards the sea.

Do you consider that fish which are full of spawn, and which are seeking the spawning ground, in general keep the mid channel of the estuaries?—When fish are in a state ready for advancing to the spawning ground they seem to pursue the most favourable course possible towards their destination, and consequently act independently of the ebb tide in the estuary and the downward current of the river.

Is it a fact that the produce of stake nets generally diminish as the season for spawning advances?—I believe that fact to be ascertained.

Then is the Committee to understand that the produce of stake nets is greatest during those months in which the salmon are in the best state, and that their produce diminishes as the season for spawning approaches?—I have reason to think so.

Where do you think the fry and the spent fish proceed after their descent to the sea?—The question is one of extremely difficult solution; but the following circumstance may be mentioned as throwing some light on the subject: they do not retire to the sea shore, otherwise the shore stake nets would succeed in capturing the kelts at least; and if they frequent the nearer banks of our coasts, I should think it probable that the bait employed by fishermen to catch the different kinds of white fish would occasionally tempt a hungry kelt. It is not known that such fishermen do take such kelts, consequently I would be disposed to conclude that the fry and the kelts betake themselves to deep water at a considerable distance from the shore.

It is of the greatest importance to the propagation of the salmon species that the red fish, or fish full of spawn, be allowed to ascend to the spawning ground freely, is it not?—Decidedly so.

What are the principal evils or obstructions to this object to which the red fish are exposed?—Mill dams may be considered as one of the most destructive impediments in preventing the fish preparing to spawn from ascending; cruives may be considered as another, and poachers may be considered as a third.

Are there not many mechanical obstructions to the ascension of the red fish in the river, which must have considerable effect upon the propagation of the salmon?—There are.

Is it not known that poaching, or the destruction of the red fish in close time, is carried on in most parts of Scotland to a great extent?—It is so.

Is there not reason to believe also that the fishing season is allowed to begin in many rivers before the fish have deposited their spawn?—Yes.

Salmon I understand to be a very prolific fish, is it not?—It is.

Then if the red fish, or fish which are in a state approaching to spawning, were sufficiently protected and enabled to deposit their spawn, and if that spawn and the fry were afterwards protected, a great increase in the number of the fish might be expected?—A very great increase indeed might be expected.

To what evils is the spawn exposed after it is deposited?—It may be occasionally torn up from its bed by floods, and it must always be exposed to the ground-rope of the coble-net fisheries; since, in many instances, the stations most favourable for using these nets are those very stations wherein the spawn is placed.

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Is not the coble net in Scotland the mode of fishing which is known in England as the common seine?—It is, I believe. *Rev. Dr. John Fleming.* 11 May, 1825.

Is it a fact that the fishery is carried on in many places where spawning beds exist?—It certainly is so.

This fact is denied by some persons, is it not; and is it not alleged that no fishery can be carried on in the shallow parts of the river where the spawning beds are formed?—I am not aware that such a statement has been advanced; but I should consider it as demonstrated that those fords at the bottom and top of pools most favourable for spawning are in general the most favourable for the coble net operation.

Can you state, from your own knowledge and observation, the effect of those nets being used in such shallows?—I have seen them used upon those shallows.

At what places?—Near the town of Perth, in the Tay.

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THOMAS FRANCIS KENNEDY, ESQUIRE,

IN THE CHAIR.

The Reverend Dr. *John Fleming*, again called in; and further examined.

TO what evils are the fry exposed after they are disengaged from the gravel, and in their progress to the sea?—They are interrupted by dam-dykes and yairs; disturbed and destroyed by the coble-net fishing. *Rev. Dr. John Fleming.* 12 May. 1825.

Be so good as state the nature and extent of the interruption, so far as your experience enables you, from each of those causes respectively?—My experience does not enable me to state the extent of those interruptions; I rely on the testimony of others who have personally witnessed them.

If the meshes of the coble net were made of a considerable size, would not that allow the fry to escape?—I should not think it possible that any size of mesh, fitted for catching salmon and trouts, would be in a condition to suffer the fry to escape readily; for in the process of hauling in the net it passes into folds, and consequently must entangle the fry; and as these folds are most numerous at the margin of the stream where the fry are most numerous the interruption must necessarily be great.

Can you suggest any means for preventing the evils to the fry arising from the present construction of mill dams?—Were the fry prevented by any apparatus from entering the mill race, were they permitted at stated periods to escape by a slap in the wall of the dam, the evil arising from the construction of the mill dams would be in a great measure removed. It would likewise be of advantage to have the summit of the wall so constructed, as to allow the surplus water to escape in a body at one place, in order that the descent of the fry might be facilitated upon the occurrence of partial floods.

Do you consider it possible to place any apparatus to prevent fry entering the mill streams which would not be highly injurious to mills and manufactories?—Yes.

But do you not consider that an apparatus with apertures so small would be likely seriously to injure those interests?—No; if properly placed.

Do you not think, that if all practices for taking fry within mill streams were guarded sufficiently by law, and punished, that the fry would have a fair chance of passing through the mill stream, and again returning to the channel of the river?—I should think they would run a great risk indeed of being injured by the rapidity of the current, and destroyed by the wheel.

Do you think that in point of fact the fry are destroyed by mill wheels?—I have understood that they are so destroyed.

But if an aperture were made in the mill dams, by which they were permitted occasionally to descend, would it not be less likely that they would enter the mill stream?—I should think so.

At what periods do you think it desirable, and for what length of time, that those sluices in mill dams for that purpose should be opened?—It would be necessary to keep these sluices permanently or occasionally opened only during the descent of the fry.

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Do you not think, that if such a slap were kept open from sun-set to sun-rise during the period of the descent of the fry, that it would secure the descent of a very great number?—It certainly would.

Supposing it to be considered inexpedient to place any apparatus in mill streams, the apertures of which should stop the passage of fry, should you not think it of importance that an apparatus should be placed at each end of the mill stream, by which all other salmon in their ascent and descent should be excluded from the mill stream?—It certainly would be most benefical to the fisheries in the upper part of the river to prevent the fish, when going up, from being destroyed by a mill wheel, or taken when resting behind it; and it would be beneficial to the fishery in general were the kelt fish in their descent in like manner protected from destruction.

Do you consider that the kelt fish, if they reach the sea, are destined either to become wholesome fish again, or breeders in the ensuing season?—Both.

To what evils are the kelt fish or spent fish exposed on their descent to the sea?—They are exposed to evils similar to those to which the fry are exposed. In using the net, for the purpose of catching a few clean fish in the spring, the kelts are likewise liable to be taken.

Do you consider that a sluice in mill dams is desirable for the sake of the kelt fish, as well as the fry?—Yes.

What sized slap might you consider to be sufficient to effect that purpose reasonably and well?—A good deal would depend upon the size of the river, and consequently the number of fish descending, and the rapidity of the current.

Is it your opinion, that salmon always return to the river in which they are hatched?—I should think not always; the fish, after they have left the river in which they have been bred seem to retire to the remoter parts of the ocean, indeed to parts with which we are wholly unacquainted; but we are in some measure acquainted with the number of foes which unceasingly persecute them, and which must necessarily mix the families or tribes belonging to different estuaries, and to the different rivers connected with those estuaries; and as salmon are obviously gregarious animals, it seems difficult to conceive, how, after such intermixture and persecution, these different breeds of fish, of different rivers, could again separate from the common flock to collect into their original groups.

Do you think that the fish of a particular river may be distinguished from the fish of all other rivers?—I have heard experienced fishermen make the assertion, and I have heard other experienced fishermen give a flat contradiction to such a statement; so that I have much hesitation in admitting that they are readily distinguished.

Is it not a fact that salmon differ very much in form?—It certainly is a fact that salmon do differ considerably, in point of form, from one another, as I have repeatedly witnessed by looking at the fish taken at the same place, by the same net, and collected together in a boat.

How do you account for individuals of the same species differing in form?—Precisely as individual differences are accounted for in other species of animals. Salmon are exposed, in their young state, to very different circumstances; some are longer in the river after they have left their spawning beds than others; and it may be supposed, likewise, that during their residence in the sea they may have access to different quantities and different qualities of food; in fact, the ordinary circumstances that produce variations in other individuals, in other species, I should conceive likely to exist and produce individual differences in the salmon.

Do salmon never enter rivers except for the purposes of spawning?—I do not think that they enter far into a river, properly so called, except for the purpose of spawning.

Is the Committee to understand, that you make a distinction in regard to this habit of the fish, between a river, properly so called, and estuaries in which the tide ebbs and flows?—I consider there is a very remarkable difference in the migrations of fish, in reference to these stations. When a fish has advanced a considerable distance into the fresh-water stream, instigated by its own natural instincts, I should be inclined to believe that it would proceed to its place of destination without again returning to the sea until it has spawned. In reference to estuaries, the sea coasts, and the immediate mouths of rivers, the fish are influenced in their movements by different causes; they seem to be indifferent to enter the river; either the river is not in a fit state for them, or they are not in a fit state for the river; they may be considered, at that time, as inhabitants of the sea coast, and of the estuary; and when in such situations they are very much under the influence of the movements

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ments of the tide; but towards the head of estuaries they must frequently be induced to enter rivers, (properly so called,) in order to escape from the numerous foes which persecute them in the estuaries.

How do you account for many salmon entering rivers early when they don't spawn till late in the season?—It is a question of extremely difficult solution. Salmon appear to require a residence of a few months in the river previous to spawning; but as they are known to enter rivers four, five, or six months before spawning, it seems to me extremely difficult to account for such apparently premature migration, unless we take into account that migration of salmon into rivers is a natural instinct of the species, and that in certain circumstances this instinct may prematurely exercise its functions. It is well known, that when floods occur in a river, the salmon, ready to ascend, speedily enter upon their upward migration; and the same temptation may excite the fish, otherwise not approaching to their spawning state, likewise to enter the river. These remarks, however, are stated rather as conjectures than as truths which may be relied upon. Such anomalous migrations occur in birds.

Is the Committee to understand that floods in rivers induce the salmon to enter them; if so, be so good as explain the grounds upon which you entertain that opinion?—It seems to be a fact so universally acknowledged and known to all fishermen, that any thing like personal testimony is unnecessary. There are many circumstances connected with rivers in a flooded state suitable for the ascent of the fish. As the water in the river increases in quantity, the shallow parts of the river become deeper, and better fitted to enable the salmon to pass over them, and, at the same time, the artificial obstacles in the form of mill dams, and the natural ones in the form of falls, are all diminished in force, so that the flooded state of the river is the one best fitted for the fish to ascend, and the instincts of the fish seem to be regulated accordingly.

Is it your opinion that salmon frequent estuaries although not seeking their spawning grounds?—It is.

Is it your opinion that salmon go a considerable distance into the rivers farther up than the estuaries, and retire to the sea before the spawning season?—I have already, in some measure, given an answer to that question, by stating, that at the head of estuaries, salmon, otherwise not disposed to enter from their natural instinct as connected with spawning, may be induced to enter for the purpose of escaping from their foes.

How far do you think that salmon may go into a river when not obstructed, and return to the sea without having spawned?—A good deal must depend upon the degree of terror of the fish, its strength, and the state of the river.

At what season are salmon to be found in the estuaries and upon the sea coast?—They seem to appear upon the shore of the sea and the estuaries chiefly during the summer months, being less numerous in spring and autumn than during the intervening period.

Does it appear that the salmon are much influenced by the tide in their movements in approaching the shore and estuaries during the spring and summer?—Yes.

State what has been observed in regard to the habits of the salmon upon the shores of the open sea and estuaries during the spring and summer months?—The stake nets, at present on the shores, catch fish in their movements while under the influence both of flood and ebb tides; and while the stake nets were in operation in the frith of Tay it was well known to the fishermen that the tide nets, with ebb courts, caught fish equally well with the same kind of nets having flood courts. There is a striking fact, which was established when the stake nets were in operation upon the Tay, that during neap tides the nets nearest the mouth of the estuary were most productive, those towards the head of the estuary were least so; but that in spring tides, those towards the head of the estuary increased in value. I refer, when speaking upon this subject, to the ebb courts.

Is the Committee to understand that salmon frequent the shores of the open sea and estuaries during the summer months, and roam at large among them without seeking to ascend the river?—I think these facts which have now been detailed seem to confirm such an opinion.

Can you give the Committee any information respecting what is the animal termed by fishermen the sea-louse?—It is extremely difficult to describe it in popular language; but it is a small insect which adheres to the scales of the fish, chiefly upon the sides and shoulders of the fish.

Is it a fact that this insect infests the salmon when in the sea, and leaves it when

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it comes into the fresh water?—That opinion seems to be true: salmon coming in from the sea have these lice adhering to them, and those returning to the sea have them not. This louse is the *Monoculus piscinus* of Linnæus.

Is it your opinion that salmon are induced to enter rivers in order to be relieved from those insects by the fresh water?—I don't think so; the same species of insect infests other fishes which do not enter rivers; it adheres to the more insensible parts, and it occurs upon fish at the time when they are generally considered to be in their best condition; if it were annoying, we might expect to witness those fish when infested by it to be in a lean state.

Are you acquainted with what are commonly termed maggots, which infest the gills of salmon?—Yes. These are not animals which ought to be termed maggots, for they do not change their state; they are perfect animals of a particular species, called the *Lernæa salmonea* of Linnæus.

At what time is this *lernæa* found upon salmon?—Trusting to my own observations (and they have been pretty extensive upon this subject,) this insect is seldom found upon fish migrating from the sea into rivers previous to spawning; and, judging from statements which have been made to me, I am inclined to think that it is an animal chiefly found in kelt fish.

Do you consider that this insect is annoying to the salmon?—It adheres to the more sensible parts, and therefore I presume that it may annoy the fish considerably.

Is it a fact that this insect leaves the fish when it reaches the sea?—I consider that the statement which I have already made is an answer to that question, namely, that I have not found it upon fish coming out of the sea; it seems to drop off in the sea, from the salmon, in the same way as the sea-louse drops off in the rivers.

At what season are salmon found the fattest, or, as commonly termed, the richest and best state?—In the frith of Tay they are considered to be the fattest in the month of June, speaking in reference to season.

Is it a fact, that as the spawn in the fish ripens, the quality of the fish falls off?—In regard to spawning fish, they always become lean in the flesh in proportion as the melt and the roe advance to ripeness; this decrease of the fatness becomes apparent principally upon the belly of the fish; before the spawn is of great size the belly is loaded with fat, but when the melt and the roe have become ripe the fat has disappeared from the belly, and that part of the fish is little else but skin. This becomes very apparent when the fish is cut up for making kipper; it furnishes indeed the test by which one could know whether a kippered fish had been one in good condition, or in the state of a kelt; the thinner the edges, the presumption is, the nearer was the fish to a spawning state.

Can you state how long the time of spawning is subsequent to the time at which the fish is in its best state?—I formerly stated, that in the Tay the spawning season was during the months of November, December and January; consequently there is the interval between the month of June and those months which constitute the spawning season already stated.

Is it a fact that salmon lose strength by remaining in fresh water?—I am not aware that they do; it would be a change most destructive to them, as they have to reside several months in fresh water, and during that period they have to make great exertions in ascending to their spawning ground.

Do salmon change colour by remaining for any considerable time in fresh water?—I have always understood that they do change colour, but I conceive that they may change colour without losing muscular strength.

Do you consider that salmon that have been for any considerable time in fresh water are as suitable for human food as when they have recently left the salt water?—That is a mere matter of taste; but the general opinion is that the sooner they are caught after they have left the sea, so much the better is their condition.

Have you ever seen fry intercepted and taken in coble nets?—I answered the question to which you now refer from the credible testimony of others.

Have you no personal knowledge, then, upon the subject?—I have stated my answer upon authority on which I could rely.

Can you state any single instance of the destruction of fry by coble nets within your own knowledge?—No, not within my own knowledge.

Have you ever known an instance of the destruction of spawn in the spawning beds, by the rope or net of the coble?—No, in reference to personal observation.

In describing the habits of the salmon, you mentioned the migration of the fish from

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from the sea to the rivers; do you consider the sea or the river to be the native element of the salmon?—I think that question was answered in a former part of the evidence.

Do you consider the sea or the river to be the native element of the salmon?—The sea, as I stated yesterday in my evidence, is the ordinary residence of the salmon; the water is its native element.

Explain that; how can the sea be the native element of an animal born and bred or produced in a river?—I may have misunderstood the meaning of your question from the terms in which it is stated. I understood the Committee to mean the ordinary habitation, or the natural residence of the salmon; but the native element and the natural residence happen not to be synonymous expressions. If I be asked which is the natural residence of the salmon I say the sea, for there it attains its size, and there it recruits its strength; but if the Committee ask me the birth-place of the salmon, I say the river.

How then can you term that to be migration which consists in the fish returning to the place of its birth?—I consider the term migration to express the shifting, at stated periods, of an animal from one station to another; it is the sense in which the term is used by every writer on natural history in Great Britain.

Is your residence upon the estuary of the frith of Tay?—Yes.

Do any salmon spawn in the estuary, or do they go higher up the river to spawn?—I am not aware that they spawn in the estuary, but they invariably ascend to what may be termed the river.

You have stated, with reference to the condition of the fish, that the best state of the salmon is in June, but that the spawning season is in November, December and January; now I would ask, whether that observation of your's be limited to the river Tay, or whether it be, in your opinion, universal in its influence over all the rivers and estuaries in Great Britain?—I am not aware of any evidence to the contrary.

Do you believe the spawning seasons throughout Great Britain to be limited to the months of November, December and January?—I do, in reference to the general spawning season, but there may be many individuals which may spawn earlier, and many which may spawn later.

Have you any personal knowledge or experience of any other river in Great Britain than the Tay?—I am generally acquainted with the frith of Forth, and I have attended to the accounts which I have heard from other quarters as a naturalist, investigating documents with respect to the habits of the salmon, and I have arrived at this conclusion, that the time of spawning in one river is very likely to be the time of spawning in another. I should think that the Tay may be considered as the standard of the United Kingdom, it being the river which pours the greatest quantity of fresh water into the ocean, and it being the river which has produced the greatest quantity of salmon.

Have you ever conversed with scientific or practical men having personal knowledge of the northern rivers of Great Britain?—Yes.

And your knowledge derived from them confirms this observation regarding the spawning time?—Yes.

Do you consider that salmon fry descend all rivers about the same season?—I should think they would descend in all rivers about the same season, provided all rivers were in the same condition to facilitate their migration.

Therefore, do you think, that if there be a difference in the time of the descent of the fry, it is principally owing to obstructions to their descent, or to the deficiency of water?—It may probably arise from both causes.

What do you conceive to be the general period in which the salmon fry descend?—March, April and May; but I have evidence that some are going down later in the season, as far as to the end of July; but the same remark applies to the fry which I offer in reference to the old fish, namely, that although there be a common descending period, there may be instances of fry descending earlier and later.

Do you consider, that if the fry which descend the rivers in March, April and May, were adequately protected and safely lodged in the sea, the salmon fishery would be very materially augmented?—I should think very materially augmented.

And that the fry which descend before March and after May are comparatively inconsiderable in number?—I should think so.

You have stated, as the Committee understand you, that the time of the ascent

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of the spawning fish, and the descent of the fry, will vary according to the quantity of water in the rivers?—Yes.

Then in a river which pours a great quantity of water into the sea, the time of the ascent of the spawning fish, and the descent of the fry, will be different from a river that pours a small quantity of water into the sea?—The greater the river is the more regular will be the period; the smaller the river, the deranging causes must operate the more powerfully.

Then how can the large river be the standard for the times of the small rivers?—Because in large rivers you have the natural motions of the fish uninfluenced by deranging causes; I take a large river as the standard, because it is freed from anomalies.

Do you understand, that when melted snow comes down a river it operates as to the ascent of the fish?—I have heard it so stated by fishermen.

But you know nothing of your own knowledge upon the subject?—I have not been able to collect a sufficient number of facts to induce me to adopt the opinion, nor to consider it as erroneous.

Can you say, of your own knowledge, whether salmon would be more apt to ascend early a river flowing from a lake, or a river flowing from the mountains?—I cannot.

In your opinion, is not a river flowing from a lake, which is a great reservoir, more steady in quantity of water than a river flowing from a mountain?—Certainly it may be expected to be more steady, and less subject to those evils which influence the migration of fish.

In the months of November, December and January, which you have stated as the months for salmon spawning in general, are not the rivers you are acquainted with full of water?—Certainly.

Do you cosider that the lakes, from which rivers take their rise, are important breeding grounds for the salmon of those rivers?—I should think the lakes are most important, in so far as they are resting places for the red fish going up, and for the kelts and fry coming down.

Do you consider, with reference to the Tay, that Loch Tay and Loch Earne are important breeding grounds for the salmon of the Tay?—Certainly, they are important resting-places.

Is it a fact that the salmon are the prey of large marine animals?—Certainly they are.

Have you had personally peculiar opportunities of observing the destruction of salmon by those animals?—I think I have had favourable opportunities.

Is it your opinion that seals destroy considerable numbers of salmon?—Certainly they do.

Are the seals numerous in the frith of the Tay; and if so, be so good as state what you have observed as to seals in that frith, and the seasons in which they are found in the greatest numbers?—The seals frequent the frith of Tay at all seasons; they are least numerous in the spring, and they are most numerous perhaps from the month of July downwards to the next spring. In the spring months they seem to retire to breed, and by July the old seals appear in the rivers in abundance, along with their cubs.

Is it a fact, that there are considerable numbers of grampuses in the Tay?—There are very considerable herds of grampuses visiting the Tay; they are termed porpoises by the fishermen of the Tay.

State what you have observed in regard to the number of grampuses in the Tay frith, and the seasons at which they resort to it?—Opposite to my residence, which is near the head of the estuary, and speaking from personal observation, I have generally observed that they appear in abundance about the middle of July, and that they continue during August and September. In different seasons, their motions are somewhat irregular; generally speaking, I would say they occur in greatest abundance in the frith of Tay, immediately opposite to my house, from the month of July to the end of September; during that period they daily rush in from the sea, and reach the head of the estuary with the flood tide, and nearly at high water; they ascend the estuary four or five miles above my residence, and return again generally on the beginning of the ebb tide; they go in a large herd, consisting of several hundred, and seem to hunt the salmon like a pack of hounds, spreading along the channel and banks, so that they necessarily must be very successful fishers, and consequently most destructive to the fisheries.

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Is it your opinion, then, that there is a considerable destruction of salmon by grampuses in the Tay?—It is my opinion that there is a considerable destruction of salmon by grampuses in the Tay. During the period I mention they came up at the flood tide almost daily to the head of the estuary; and I have reason to know that in the lower part of the estuary, seaward of my residence, they make their appearance much earlier in the season; indeed I know from the testimony of a credible witness, that they made their appearance this year in the month of February, and were hunting fish between Dundee and the sea. They make their daily or tidal appearances towards the mouth of the estuary much earlier in the season than they do near my residence.

Are there in the Tay, besides grampuses, porpoises, properly so called?—Yes; the porpoises are termed puffies in the Tay, and usually appear in pairs, never in flocks.

Do you consider that those porpoises or puffies destroy the salmon?—I do not think that they can destroy full grown salmon; at least, judging from their ordinary size, and the size of their mouth, I should not conceive them capable of killing the large fish. I have had an opportunity of opening the stomach of some of the puffies or porpoises, and I have only found the remains of small marine worms, and the vertebræ of very small fishes. I should think them not at all destructive to the full-grown fish, although they may devour the fry in their descent to the sea.

Whether do you think that the seals, grampuses and porpoises, have increased or diminished in number since you have been acquainted with the Tay?—They have decidedly increased in number.

Be so good as state the grounds of that opinion?—I have peculiar opportunities, from the position of my house, to witness the daily migrations of grampuses, and also to inspect the banks on which the seals rest, and it consists with the observations which I have been able to make, that both seals and grampuses are much more numerous than they were when I first came to reside on the banks of the Tay. The seals in particular have increased to a very great degree. I have it in my power to say this, by commanding from the windows of my house a view of a sand bank, one of their favourite places of resort; and it is now in my power to state, that the flocks frequenting that sand bank contain many more individuals than I formerly witnessed.

Can you suggest any means for the destruction of those animals?—When the stake nets were in operation the seals were greatly interrupted in their movements, and, it is said, were very considerably diminished in number. At that time several fishermen were induced to devote a considerable portion of their time in attempting to destroy them. Perhaps were premiums to be offered to the fishermen, greater exertions than are now made might be used to catch them, and I should think such efforts might be made with success; but at present the seals seem to be unmolested.

Would not those animals yield oil which would make it worth while for their destruction?—They would yield a considerable quantity of oil; but I suspect it would require a bribe to induce fishermen to be very active in catching them.

Have you had opportunities of observing or knowing whether the seals, grampuses and porpoises are common on the shores of the United Kingdom generally, and in other estuaries than the estuary of the Tay; and if so, state what occurs to you upon them?—I have reason to believe that seals, grampuses and porpoises are common in the seas of the United Kingdom; and I found my opinion upon the fact of having witnessed them on the east coast of Scotland, the northern islands of Scotland, the western islands of Scotland, and the sea between England and Ireland.

Have you on all those occasions observed those animals in considerable numbers?—I have.

Then is it your opinion, that generally throughout the coasts and estuaries of the United Kingdom a considerable destruction of salmon takes place by those animals?—I should think a very great destruction of salmon must take place in consequence of the efforts of these numerous depredators.

4.—Fence Months, or Close Time.

What is understood to be the close time in the Tay?—From the 26th of August to the 10th of December.

Is this close time strictly observed by fishermen, or do they occasionally fish later than

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than the 26th of August?—I have seen them fishing several days, if not weeks, after the close season had commenced, but these, generally speaking, were fishermen poaching. The fishermen, in some parts of the Tay, fish two or three days after the close season: and this fishing is termed *washing their nets.*

In point of fact, do the fishermen begin to fish so early as the 10th of December in the estuary; if not, be so good as state when they usually begin?—In the estuary in my neighbourhood, on the south bank of the Tay, they seldom begin generally before the month of May.

Have you occasion to know whether the close time is very different in different rivers in Scotland?—I have understood it is observed at different periods in different rivers in Scotland.

Do you consider that the present close time, namely, from the 26th of August to the 10th of December, is the best close time, or do you consider that any alteration is necessary?—I should think that the present time is not the best close time.

For what reasons do you state that opinion?—Because if fishermen begin to fish in the month of December they must disturb the fish on the spawning grounds. In the spring months they must disturb the spawning beds, and interrupt the progress of the fry and the kelts towards the sea.

Do you think that the same close time should be extended to all the rivers, or that the close time of each river should be fixed according to the ordinary condition of that river, considered individually?—I am of opinion that the close time should be the same in all the rivers, otherwise poaching would prevail, and it would be extremely difficult to frame any law which could accommodate itself to the varying circumstances of all rivers. The smaller rivers vary in different seasons, and you would require, in that case, a law for each season.

But do you consider that there are any material variations not depending upon the season but upon general facts, such as to warrant a variation in a permanent law?—I do not think that there are such general causes in operation.

Therefore it is your opinion that, generally speaking, the interests of all rivers, properly understood, are nearly the same, and that a general and permanent law would be conducive to the interests of all?—I certainly am of that opinion.

Is it your opinion, although individuals might suffer loss for a time, that a good law well observed would amply compensate for that loss?—There might be individual losses sustained by such a general or universal arrangement, but the public would be decidedly benefited, and in all probability the prevention of poaching, by increasing the number of salmon, would ultimately more than compensate for the loss which these individuals might consider themselves as having sustained.

Is the Committee to understand that you consider that the rivers are not all in an equally proper state for fishing at the same season of the year?—I have already stated that they vary.

Do you think that the draining of lands and other agricultural improvements have affected rivers in the neighbourhood in respect to the salmon fisheries?—I should think not, in any considerable degree; they must have benefited rivers, in reference to the salmon fishing, to some extent, in consequence of producing a more regular supply from the springs now conducted under ground, and not exposed to evaporation; and I should think that even these remarks apply exclusively to the lower and more cultivated districts of the country.

Is it a fact that particular parts or sides of rivers are more early, as the fishermen term it, than other parts of the same river?—I have heard statements to that effect, which I have no doubt may be true.

But do you consider that such difference ought to make any exception in regard to the generality of the close time?—I should think not.

What close time would you, as a naturalist, consider to be most proper to produce the greatest quantity of fish from the salmon fisheries?—Assuming that the spawning beds ought to be protected, that the fry and the kelts ought to be protected, and that the fish, as they approach and become ripe for spawning, should be protected, I should state, from the 1st of August to the 1st of May as the proper close season, taking into consideration that towards the 1st of August the fish fall off in value, and become lean in proportion as the melt and the roe increase in size.

Do you think that by extending the close time to so long a period as that you have mentioned, of limiting the fishing season to three months in the year, a greater quantity of fish could be caught than if the fishery were carried on for a longer period?—I am of opinion that a much greater quantity of fish would be found on

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our sea coasts, in our estuaries and rivers, and consequently that a much greater quantity might be caught.

But although you, as a naturalist, consider that this short fishing season would produce a greater quantity of human food than a more extended season, do you think that it is necessary for the purpose of obtaining a considerable increased supply of fish, or that it would be expedient to limit the fishing season to three months?—It might not be expedient to limit the fishing season to three months. I have merely stated that limitation in reference to the natural history of the fish. In an economical point of view, or a national point of view, it may be expedient that the fishing season should be permitted to be more extensive.

Is the Committee to understand that you think a great benefit might be done to the fishery if the regulation of the seasons were altered, even although the fishing season were not limited to the short period you have mentioned?—I should think so.

Looking to the subject, not as a naturalist, but as one of the community, what period would you recommend as the close time, and for the yearly fishing season?—Viewing the matter in an economical point of view, I should think that it would be much better to permit the fishing to commence earlier than the 1st of May than to permit it to continue longer than the 1st of August; and my reasons for that opinion are these: in the spring months, although the kelts and the fry be descending towards the sea, the earlier migrating fish have entered the rivers, consequently these clean fish may be taken; and as salmon at that season of the year is scarce, even the few that would be then taken would be eagerly sought after and fetch a high price. If the fishing season were permitted to extend beyond the beginning of August the rivers would be cleared of the fish with which they are stocked at that season. I have already given it as my opinion that the fish which enter the rivers early breed early, consequently all the early breeders would be destroyed; and if the spawn first deposited be the spawn from which the fry proceed at the earliest period, then by destroying the early breeding fish you would prevent the early fry from appearing; and as early fry have more chance of escaping readily to the sea, in consequence of the abundance of water in the rivers in the spring season, they would in that case be most likely to produce the best fish afterwards. It is of importance to yield them protection. In the spring, the kelts which might be taken in the nets a short period before the month of May, we are to consider as exposed to many enemies before they become in a fit condition to be again taken by our nets, and the fry that may be disturbed or destroyed immediately before the 1st of May would likely be that fry which had been latest produced, and consequently liable to the greatest number of accidents in reaching the protection which the sea yields them: these circumstances render their capture or destruction an object of less importance.

Do you consider by fixing the period for the commencement and closing of the fishery you now mention, that there would be a great increase of the produce in the fishery, and that the fish caught would be always in good condition?—I should think that there would be a very great increase indeed in the produce of the fisheries, and the fish caught would, generally speaking, be in good condition.

What do you consider to be the object which ought to be kept in view in fixing the extension of the fishing season and the duration of the close time?—The object which ought to be kept steadily in view is the permanent and abundant supply of fish; and as fish, from natural causes, are exposed to a considerable number of dangers or evils, arising from differences of season and the different state of rivers, the law upon the subject ought to give greater protection to the fish than they might at first sight seem to require, taking one or two seasons exclusively into consideration; hence it is, that in giving my opinion, in reference to close and open seasons, I took into consideration the evils to which salmon are exposed in rivers, owing to the variable condition of these rivers, in some instances favourable and in other instances unfavourable to their growth.

Supposing the whole fishings in the frith of Tay, and all the streams that run into it, to be the property of one individual who had unlimited means of preserving the fish, what would you recommend to him as being the best mode of managing his property, with regard to close time and the mode of fishing?—I should think, generally speaking, the interests of an individual would be similar to the interests of the public in such circumstances.

Be so good as point out what those interests would be?—They would be these; namely, the protection of useless fish from capture, and the securing of an abundant supply of early and suitable breeders.

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Be so good as mention the close time you would in that case recommend?—I have not made up my mind upon that subject, as it is merely a question of expediency.

Would not the period you recommend, while it supplied a greater quantity of fish from the estuaries, necessarily diminish the supply of the river?—I am not aware of such effect being likely to be produced.

Upon what principle do you dispute the correctness of that inference?—By not having any thing in the shape of evidence to warrant such an inference.

Is it not the natural habit of all salmon to ascend rivers to spawn?—I have stated that in a certain period of the year they are not in a state to ascend the rivers.

Is it not the nature of all salmon at some time or other to ascend the rivers for the purpose of propagating their species?—Yes, at some time or other.

If the salmon are caught they never can ascend the river at any time?—That is true.

Then an obvious diminution must take place in those rivers where there are stake nets?—If stake nets in an estuary catch salmon advancing directly to the river they must occasion a corresponding diminution in the river fisheries; but such fish are not caught in stake nets. The diminution may, however, be produced by coble-net fishers near the mouth of a river, and at a little distance from the estuary, for the fish caught must be such as had entered and were ascending the river.

As the fish come all their way with a view to ascend the rivers to breed, by intercepting them there you prevent their breeding?—I have not stated that they ascend in the summer months to breed, whatever they may do at another season of the year.

Veneris, 13° die Maii, 1825.

THOMAS FRANCIS KENNEDY, ESQUIRE,

IN THE CHAIR.

The Rev. Dr. *John Fleming*, again called in; and further Examined.

5.—MODES OF FISHING IN USE, AND THEIR EFFECTS.

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WHAT are the modes of fishing at present in use in the river Tay, in the estuary of that river, and the adjacent sea coast?—The coble-net fishing is practised in the river and estuary; the stake net is in use on the adjacent coast.

In what situations are coble nets used?—They are exclusively confined to the estuary and river.

In what situations are stake nets used at present?—Only upon the sea coast.

Do you consider the modes of fishing, as you have described them, now in use as being most suitable for the different stations?—I do not; I consider the coble-net mode of fishing as a very efficient mode in rivers, but by no means suited to estuaries, or to sea coasts; the stake-net mode of fishing seems peculiarly adapted to sea coasts and estuaries, being an engine suited to those stations where the tide in ebbing leaves extensive dry banks.

What are the reasons which induce you to consider the coble net as suitable to the fishery in the river?—In rivers, by means of the coble net, the stream can be effectually reached, and consequently it is suited for catching of fish in such a station, either during their ascent and descent. The regularity of the current in rivers, in one direction is suited to the coble net, and the numerous fords at those pools to which the fish resort likewise furnish facilities for using the coble net, thus rendering it a very efficient engine in rivers in general. In an estuary the coble net is by no means a suitable engine; there the varying depth of the water, the numerous inequalities of the bottom, and the small portion of the stream which the net can embrace, render it an unsuitable engine; but its principal defect in estuaries seems to arise from the occasional, or rather the frequent, swell in the water, owing to its direct communication with the sea, by which the ground rope of the net is lifted from the bottom, thereby permitting the fish inclosed in the net readily to escape. The same objections against the use of the coble net as a suitable engine apply in an equally great, if not in a greater, degree to the sea coasts.

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Do you consider that the objection to the coble net, which you have just stated, arising from the swell of the water, applies to all places where the tide ebbs and flows in any considerable degree?—Certainly I do. I may add, that I have witnessed on many occasions the injurious influence of such swell to the operations of the fishermen.

These are the grounds upon which you consider the coble net a defective mode of fishing, as applied to places where the tide ebbs and flows?—I do consider these as the great objections to the use of the coble net, where the tide ebbs and flows—objections which point out its inefficiency in such situations.

Do you consider, therefore, that some other mode of fishing is necessary for proprietors possessing fisheries within the reach of the tide, in order to give them the fair value of their property?—There is not a more inefficient engine in such situations than the coble net; several other modes of fishing, much more suitable to such stations, have been devised, and carried successfully into effect. The proprietors on estuaries and upon sea coasts cannot, by using exclusively the coble net, catch all the fish which they otherwise might do, consequently cannot render their fishing stations so productive as otherwise they might become.

The Committee understand that there were other modes of fishing formerly in use in the frith of Tay, if so, be so good as state what those modes were?—Previous to the introduction of the use of stake nets in the estuary of the Tay, yairs and stage nets were in use.

When was the use of yairs and stage nets abandoned?—On the introduction of the stake-net mode of fishing.

About what period was that introduction?—About the year 1798.

Do you consider the stake as the most suitable mode of fishing for the coast of the open sea?—Certainly I do.

Do you also consider that the most suitable mode of fishing for the estuaries?—Certainly I do.

How does it happen that stake nets are not used in the estuary of the Tay?—The use of stake nets in the estuary of the Tay was prohibited by the courts of law.

You have said that stage nets and yairs were abandoned when stake nets were introduced, were those modes of stage nets and yairs then employed when the use of the stake nets were prohibited?—They were likewise prohibited by the courts of law, under the idea that they were a *fixed apparatus.*

Are not stage nets and yairs a fixed apparatus?—They are a fixed apparatus, and it was in consequence of their being so that they have been prohibited in the estuary of the Tay.

Then is it a fact, according to your knowledge, that by the existing law of Scotland, as interpreted by the courts, the least suitable engine only can be employed in an estuary, while the most efficient modes of fishing are prohibited?—It is my opinion, in reference to the Tay, that in consequence of the prohibitions of the courts of law the least efficient modes of fishing are permitted, and the most efficient modes of fishing are prohibited.

In using the word *efficient,* do you mean *efficient,* always bearing in view an adequate protection of the breed of salmon, and not a fishing in stations so as to diminish the progressive supply?—By an efficient mode of fishing I mean those modes which are most successful in catching the greatest number of clean or marketable fish, and least injurious to the preservation of the breed of fish.

Then do you mean to state, that if clean and marketable fish only are taken no injury, in your apprehension, will be done to the general and permanent produce of salmon fisheries?—With suitable regulations, I am of opinion that no injury would be sustained by the employment of these engines which I have termed efficient engines.

Do you understand that the law which has been carried into effect by the authority of courts is founded upon the statute law?—It is so, as I understand.

Do you understand that such statutes were enacted by the parliament of Scotland long before the union of the kingdoms?—Yes.

Do you know whether those statutes are general statutes, or laws enacted for local regulations?—These are general public statutes.

Do you consider that fishing by stake nets is, under those decisions of the court, illegal, in all the estuaries of Scotland equally as in the estuary of the Tay?—I understand that stake nets are at present in use in the Moray frith, and in the Solway frith, consequently the decision of the court of law in reference to the Tay does not appear to have been carried into effect in those estuaries.

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Do you apprehend that any different law can apply to the Moray frith than any other frith in Scotland, or that there can be any exception as to the Moray frith?—I am not aware of there being any. In reference to the Solway frith, I believe that they are at this moment legal engines.

Is it a fact, that fishing by stake nets is allowed upon the shores of the open sea, although not allowed in the estuary?—Stake net fishing is practised on the open sea, and I am not aware that the courts have interfered in prohibiting them upon such stations.

Then, in point of fact, fishing by stake nets is at present practised upon the open sea coast, adjacent to the estuary of the Tay, but not permitted or practised upon the estuary itself?—Yes.

Are you aware of any reason in the habits of the fish, or any natural cause for the distinction between the modes of fishing on the shores of the sea coast and upon estuaries?—I am not aware of any circumstances connected with the condition of the estuary, or with the habits of the fish, which could warrant the prohibition of the stake nets in the estuaries, while the same engines are permitted upon the open coasts.

What is understood to be the total number of salmon at present caught annually in the river and estuary of the Tay, and its tributary streams?—I have understood that the general number of salmon at present caught in the Tay, including the estuary, would be from 30,000 to 35,000 in round numbers; I speak of salmon at present; I do not include grilse as salmon.

What number of those are understood to be caught in the estuary?—I have understood about 4,000 or 5,000.

What was the total number of fish caught annually in the river and estuary, and tributary streams when the stake nets were in use in the estuary?—I have understood that the number of fish, during the full operation of the stake nets in the estuary, was about double.

You speak of the same fish exclusive of grilse?—Yes.

What number of those were caught in the estuary?—I have understood between 20,000 and 30,000 to be the produce of the stake nets; that is the additional produce in consequence of the stake nets.

Is the Committee to understand, that when stake nets were in use in the estuary, and were so productive, that there was not any considerable decrease in the produce of the river properly so called?—I have no reason to think that during the operation of the stake-net mode of fishing in the estuary there ever was a decided diminution in the produce of the river fishery.

Do you know whether it were a fact, that a decrease in the amount of the river fishery took place during the time stake nets were in use in the estuary?—I have understood that, in some cases, a diminution did take place.

How do you explain the circumstance, supposing it to be so, that the rental of the river fishery decreased when the produce was not considerably diminished?—The success of the stake-net mode of fishing in the estuary occasioned very great alarm to the proprietors and tradesmen of the river fisheries, and I consider, that where the rentals were diminished, the tradesman had been successful in taking advantage of this state of agitation.

Is it your opinion, that in process of time the causes you mention as leading to the reduction of the rentals would have ceased to operate, and that the river fisheries would have again produced their full value?—I entertain no doubt that they have returned to their former value, after those fears had subsided.

Do you consider that the increased supply in the market might have contributed to reduce the rental of the river fisheries?—Perhaps it might, to some extent; but it does not appear that the price of salmon fell in consequence of the additional supply from the stake nets of the Tay.

Upon what evidence do you found your opinion, that the quantity of salmon caught in the river was not sensibly diminished by the very great increase in the produce below?—I found my opinion upon documents which, I believe, are before the Committee.

From your knowledge of the habits of the salmon, and the destruction to which they are exposed from grampuses and seals, do you consider that a very great number of salmon may be caught in estuaries and shores of the open sea without perceptible injury to the river fisheries?—I do think so.

Be so good as state the grounds of that opinion?—When I take into consideration the number of salmon which are upon the sea shore and in the estuaries during the

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the summer months, in connection with the numerous herds of grampuses and seals which unceasingly pursue and feed upon them, I cannot help arriving at the conclusion that very many salmon may be caught which at present are devoured by these monsters.

Is it your opinion that there are considerable numbers of salmon which frequent estuaries and the sea coast, which are not seeking the river, and which would not be caught by the river nets, although they escape the nets in the estuaries and upon the sea coast?—I have already stated, that there are numbers of salmon upon the sea coast and in the estuary during the summer months, which do not appear to be disposed to enter the river; these, consequently, are roaming about under the influence of the tide, and are exposed daily to those foes to which I have already referred.

Is it your opinion that a great number of those fish are destroyed by grampuses and seals?—An immense number.

Can you form any estimate of the probable destruction of fish in the estuary of the Tay by those animals?—I have no hesitation in believing that they annually devour many more salmon than have ever, in any one season in the Tay, been captured by man.

Is it your opinion that the use of the stake net in the estuary obstructs or facilitates the destruction of salmon by grampuses and seals?—I am of opinion that the use of stake nets in the estuary has a tendency to diminish the number of grampuses and seals.

Be so good as state your reason for holding that opinion?—What the number of seals and grampuses in the Tay may have been previous to the erection of stake nets, I am not prepared to state, but I know that they were comparatively few in number at the period when the stake nets were abolished, and that since that period to the present time they have been progressively on the increase; my opportunities for making such observations at present being favourable.

Then do you mean to state it as your opinion, that if salmon in the estuary be not caught in the estuary, a great proportion of them are destroyed by grampuses and seals?—Immense numbers of them must necessarily be thus destroyed.

Do you consider that any considerable portion of salmon which frequent the estuary go back again to the sea, when not taken by man, and when they also escape the grampuses and seals?—I do think they are moving backwards and forwards, influenced by various causes, and that they may enter and retire repeatedly from estuaries without entering the river.

Is it a fact, that many stake nets were constructed, with their chambers or courts so placed as to receive the fish going out of the estuary, or along the coast with the ebb tide, and were such stakes successful?—Yes.

Is it your opinion, that fish taken by such nets, having their courts to the ebb tide, are fish not seeking the river?—Yes; and I found my opinion upon this circumstance, that these fish must have been influenced in their movements by the ebb tide, which influence they could very easily have resisted if they had been so inclined, as they are known to be able to resist and overcome the downward current of water in rivers.

Then is it upon the whole your opinion, that a great number of fish may be taken in the estuary or sea coast without any considerable injury to the fishery in the river above?—That is my opinion.

Do you mean that the great portion of the fish which might thus be taken are fish which otherwise might fall a prey to grampuses and seals, and as a great portion would go out of the estuary to other coasts, they would fall a prey to the larger marine animals in other places?—I do entertain such an opinion.

Your opinion being, that a considerable portion of salmon in the estuary are the prey of grampuses and seals, do you consider that if the salmon be so captured a diminution of salmon in that estuary is likely to take place?—Certainly, to the extent of the destruction occasioned by these foes.

But do you consider that that cause is likely to operate in a progressive degree upon the general produce of the estuary, and the rivers adjacent?—I should think so, if those foes progressively increase.

Do you know whether any thing has been observed upon that subject in the estuary of the Tay?—The increase of these depredators has been observed, and consequently the greater has been the consumption of salmon, which is their ordinary food.

You have stated that the produce of the fishery of the Tay, including the estuary,

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during the time stake nets were in use, were from 30,000 to 35,000 fishes taken by stake nets; do you consider that quantity was the greatest which was likely to have been so produced, or that there might have been an increase?—I do not think that that was the greatest quantity that might have been produced, by any means; I conceive that there might have been many more salmon captured in the estuary.

Do you consider that an increased capture might have taken place permanently, without any tendency to reduce the general and permanent produce?—Yes, with suitable regulations as to close time.

Be so good as state the reasons for which you hold that opinion?—During the time that the stake nets were most generally in use in the Tay, there were many stations most suitable for the erection of those engines which were unoccupied: as one instance, I may state that on the south bank of the Tay there were nearly six miles on which there was not a single stake net, and in the course of those six miles there were several very favourable stations for the erection of such nets; and I may likewise mention, that during the operation of the stake nets there was but little competition among the fishermen, the business chiefly being in the hands of a single company.

In point of fact, are you acquainted with any of the stations in the estuary of the Tay suitable for stake nets?—Certainly.

And upon which none were ever erected?—Upon which none were ever erected.

Do you mean to state your opinion, that if stake nets had been erected upon all stations suitable for them in the estuary of the Tay, a greater number of salmon might have been taken, without having a tendency to the ultimate diminution of the fishery?—It would certainly be so, under proper regulations as to close time in the rivers.

And could this increased produce of the estuary have been obtained without any decrease in the produce of the river fisheries?—I should think so.

Then do you mean to state that you think the total annual produce of the rivers flowing into the estuary, flowing into the Tay and the estuary itself together, might have exceeded 60,000 annually?—Perhaps double that number.

Do you wish it to be understood as your opinion, that there is an annual loss to the public of at least 30,000 salmon by the stake nets not being allowed in the estuary of the Tay?—I should think that the annual loss is much greater.

Are you acquainted with the station in the estuary called "*Sea-side*"?—I am acquainted with the station in the estuary termed "*Sea-side Bank*."

Where is it situated in reference to your place of residence?—It lies directly opposite to my residence, on the northern shore of the estuary.

Was there ever a stake net on that station?—There was a stake net upon that station.

What was the annual produce?—I have understood that in the course of one season it has produced 7,000 salmon.

That net was abolished by a court of law?—It was put down by order of the court.

Before a stake net was erected there, was the sea-side station of any value as a fishery?—I have not the means of knowing its value previous to the erection of the stake net, unless I may be permitted to judge by its value since the abolition of the stake net.

What is the present value of it?—It is of no value at present.

Do you apprehend that it was of no value before the stake net?—I am not aware of any circumstances existing before the use of stake nets calculated to render it valuable as a fishing station.

Do you know that that station has been fished by coble nets before stake nets were put down?—I have cause of knowledge that it has not been regularly fished since the stake nets were abolished; indeed I am not aware that since the abolition of the stake nets it has ever been regularly fished by the proprietor or his tacksman.

Do you infer from that, that it is not fished because it is not worth the expense of so doing?—I consider that it is at this moment, as a fishing station, unable to defray the expense of a single coble net, and I take my opinion upon the subject from the following circumstance, with which I am personally acquainted. Seven or eight years ago the late Mr. Richardson of Perth stated to me by letter, that, in compliance with the wishes of the proprietor, he had resolved to send down from Perth a couple of coble nets with the view of fishing the sea-side bank, and applied to me for

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for the use of my barn as a lodging-house for his fishermen; the boats accordingly arrived, and after fishing for some time on the sea-side bank, I observed one morning in the possession of the foreman a moderate sized salmon, and on congratulating him in regard to his success, he intimated to me, that being about to return to Perth, he had gone to Newburgh, a distance of six miles, to purchase this fish by order of his master, with a view of presenting it to me, in consequence of not having captured during the whole of their trial on the sea-side bank a fish that could be considered as at all adapted for offering as a present: the present was made to me in consequence of my having refused to accept of any rent for the barn.

Have you observed grampuses and seals frequenting the place where stake nets were formerly placed by the sea side?—I have observed frequently, from my residence, one or two flocks of seals occupying unmolested the sea-side bank.

Do you consider that those seals capture the fish, which if the stake net had continued upon the sea-side bank would have been taken by that net?—They certainly come in for their share.

Do you consider, in reference to the use of the coble net, which you have mentioned as being attempted on the sea-side bank, that the fishery of that station cannot be carried on without fixed machinery of some description or other?—I consider that the sea-side bank cannot be fished by the coble net, but may be fished with success by the stake net.

Do you consider that the case of sea-side bank, to which you advert, is a singular instance, or an example only of many similar cases?—It is only an example of many similar cases in the frith of Tay.

What became of the salmon which were caught in the estuary of the Tay; were they consumed in the neighbourhood, or sent to a distant market?—Generally speaking, they were sent to the London market.

Then is the Committee to infer, from your former answer, that the supply of salmon to the London market might be increased by 30,000 in the course of the season, in the Tay alone, if stake nets were allowed in that estuary?—A much greater supply of salmon might be annually sent from the Tay than the number now caught, provided stake nets were permitted to be used, and the close time in the river suitably regulated.

Is it your opinion, that a corresponding increase in the produce might be obtained from other estuaries and sea coasts of the United Kingdom, in a greater or less proportion, if stake nets were introduced?—Yes.

Do you state that opinion generally, keeping in view such a system as would tend to the increase, rather than a permanent decrease of the salmon fisheries?—I do consider that an additional supply might be obtained as a permanent supply.

Is it, then, with that view that you have stated your opinion in favour of stake nets, as a system of fishing in the estuaries and sea coasts generally?—It is with that view; being convinced that a great additional supply of food might be obtained for the public by the use of stake nets, without any diminution of the breed taking place.

Do you consider that the proprietors of fisheries in the river, above the point to which the tide flows, might, if stake nets were established in estuaries, retain as valuable fisheries as they are likely to possess if stake nets continue suppressed?—In reference to quantity, certainly I am not aware that there would be a decided decrease in the river fisheries; in reference to value, it is extremely difficult to form a correct opinion upon the subject, because, were stake nets permitted, the quantity of fish sent to market would necessarily be much greater, and consequently the competition might lower the price of the article generally, though this effect did not formerly take place; but I am of opinion that were stake nets permitted in those places most suitable for their erection, perhaps a quantity of fish might be procured greater than the home market could consume, and by making it an article of export the price might not fall much lower than at present.

In giving your opinion respecting stake nets, it has been necessary to speak of the estuary and of the sea coast as distinguished; be so good as state, in reference to the Tay, the point at which you consider the estuary to cease, and the Tay to commence?—I should consider the estuary to cease, and the Tay to commence, at the bar which is at the mouth of the estuary.

Will you state the point at which you consider the river Tay to cease, and the estuary of the Tay to commence?—I should be inclined to fix the limit between the river and the estuary at that point where the river reaches the main level of the

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ocean. I may state, in explanation, that if you consider the river as terminating at high-water mark, the sea in that case is taken at its maximum, and the river at its minimum state; if we consider the river as terminating at low-water mark, the sea in that case is taken at its minimum, and the river at its maximum state: in the one case you permit the sea to encroach upon the river, and in the other case you permit the river to encroach upon the sea. As the surface of the ocean is subject to oscillations, constituting high and low water, we can only determine its level by taking the mean of these; if then we take the mean of these as the surface of the ocean, I am inclined to consider a river as naturally terminating at that point when it reaches this level.

In speaking of stake nets, you have generally said you consider that a useful mode of taking salmon, when under proper regulations; will you state to the Committee such regulations as you consider necessary to render them proper engines for the capture of fish; such as you should consider generally applicable?—I should consider that they would be applicable and useful, provided they in no case were permitted to extend below the low-water mark of neap tides.

Do you consider that that limitation is the principal regulation which you would consider necessary?—I should consider that limitation as by far the simplest, and one of easy and universal application.

Did any or all of the stake nets which were at one time established in the Tay extend below the low-water mark at neap tides?—I believe, generally speaking, they did not extend below the low-water mark.

Then you consider that, generally speaking, they were subjected to the regulation which you would recommend, or rather, that they conformed to the regulation which you now recommend?—I have no reason to think otherwise.

The Committee understand that stake nets are constructed exclusively of stakes with nets extended upon those stakes?—In some places I understand wicker work was employed at the bottom, but in the Tay netting was generally used exclusively.

Do you consider such wicker work to be injurious?—Yes.

You would recommend, therefore, that no stake nets should be permitted having any portion composed of wicker work?—Yes.

For what reason do you make such recommendation?—Because such wicker work would intercept the progress of all kinds of small fish, would collect more effectually the floating weeds, and consequently would be injurious, generally speaking, to the fishermen themselves, and would furnish objections against their use by those who consider that stake nets are injurious to salmon fry, however unfounded such objections may be.

Do you wish therefore to be understood, when you recommend the use of these stake nets, that such nets should be exclusively formed of netting extended upon stakes?—Exclusively consisting of netting spread on and supported by stakes.

And what size do you think that the meshes of such nets ought to be?—I am not prepared to answer that question; but I do not think that it is for the interest of the proprietors to have small meshes, especially on the sea coasts and towards the mouths of estuaries, where the tides are strong and apt to injure the stake nets.

What is the general size of the mesh that you have seen used?—From three to four inches from knot to knot.

From knot to knot?—From knot to knot.

Do you mean that no part of the stake net is smaller in the mesh than another?—I am not prepared to answer that.

From knot to knot, the mesh being extended to a square?—Yes.

Do you consider that in fixing the nets upon stakes, it is necessary to provide for the meshes of the net being fully extended, so as not, by being drawn in any direction, to constitute an objection which the extended meshes would not create?—It may be expedient to have such a regulation.

Otherwise the same evils might arise from the net improperly placed, as you have stated, or likely, to be produced by wicker work?—I am not aware that any evils of any consequence would likely arise from the meshes of the net becoming oblique, except the circumstance of capturing useless fish.

Do you not think it would be a reasonable provision that the extension of all the meshes of the net should be required, in order to obviate the objections that might be made?—It might be expedient to make such an arrangement.

Do you think that in cases where stake nets have wicker work at the bottom, the injury is of such a nature as to induce a recommendation for a change?—I think it would be expedient to have such an injunction or recommendation.

Do

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Do you mean with regard to the protection of the salmon species?—I do not.

Then do you entertain an opinion that there is any inexpediency in allowing stake nets to take every species of small fish to which you have referred?—It is certainly nexpedient to permit them to destroy young fish, as these are the food of the larger kinds.

But are there not several kinds of fish, which although small, have yet attained their full growth?—Certainly so.

Then would you consider it inexpedient that the stake nets should be permitted to take fish of that description?—Yes, where these fish are usless as articles of food.

But are there not many such fish which are not useless as articles of food, but which are daily consumed as food?—I have never stated that there are fish caught in stake nets which are useful or useless as food, with the exception of salmon.

You have stated that grampuses and seals have inereased very much since the use of the stake net was discontinued; you have alıo stated that immense numbers of salmon are destroyed by those animals: are those salmon destroyed in the situations where the stake nets were formerly placed?—Many of them are.

During the time that the stake nets were so placed, have you known instances of grampuses or seals being caught in those stake nets?—I have evidence that they were caught in those stake nets, but not of my own personal knowledge.

Lunæ, 16° die Maii, 1825.

THOMAS FRANCIS KENNEDY, ESQUIRE,

IN THE CHAIR.

William Waters, called in; and Examined.

William Waters.
16 May, 1825.

WHERE do you reside?—In the neighbourhood of Beachley, the Old Passage, between Chepstow and the Old Ferry, about a mile from Chepstow.

What is your profession?—I follow the salmon fishing, and have been the ferryman at the Old Passage for the last eighteen years.

What are the modes of salmon fishing that are practised near Chepstow?—The salmon are fished with nets near Chepstow.

What sort of nets?—They are made upon two poles, and put over the side of the boat, and then the current of the tide runs through the meshes.

What other modes of fishing are there with which you are acquainted?—Nothing but those fishing nets of that description are used there.

Is there any other mode of fishing?—Up the river Severn they fish with the seine, which reaches across the river.

Do you mean to say that the seine is kept constantly stretched across the river, or only drawn across occasionally?—It is run across from one side to the other, and then it goes down with the current, and then it is brought back in a circle.

Do you know any thing of the salmon fishery at the river Usk?—I don't know much about the river Usk; as far as Carlin, they fish in the same manner as they do at Chepstow.

At what season of the year do you commence your fishing?—It begins in the month of March, and they fish till the 12th of August.

At what time do the salmon fry come from the upper part of the river?—In the months of April and May.

What do you believe to be the time when the salmon spawn?—In the months of October and November.

Do you ever observe fish out of season coming down the river where you are accustomed to be?—Yes, the old fish, from spawning.

At what time do they come?—They come down in December; and some come down in the month of January; that is, what we call the second spawning, which is called laurel.

How do you know they come down in December and January?—Because we pick them up sometimes on the shore, they are so weak that they cannot swim.

Then it is not by fishing?—No.

Are there any fish caught at places of which you have any knowledge, by any

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contrivances that take them all the year round?—There are small baskets called putchers, which are made in January, and put down as fast as we can make them, and they remain there as long as they last; they remain all the year round. They are of this construction. [*Here the witness produced a specimen of the basket or engine called a putcher.*]

Are many fish taken in that way?—I have seen two in one of those putchers at one time.

How many of those are placed in one line stretching from the shore?—Perhaps 600 or 700.

Have you any idea of the number of salmon that have been taken by them in any one year?—I cannot say what the number may be.

But it is a great number?—I have seen eleven salmon taken out of one row in one ebb tide.

Were they clean fish or foul fish?—Clean fish.

Were they in season or out of season?—In season.

But do they not take fish out of season also?—Yes, they have the same chance of taking the one as the other.

Are these baskets or putchers placed with their mouths to the tide?—Yes, as the current runs, either flood or ebb.

Do you consider that those putchers are injurious to the other fisheries by nets?—Yes; because as to the fish that are taken by those the fishermen have not the chance of the fish returning back again, which they would if it were not for those.

Do you think that it would be an improper mode of fishing if those putchers were removed at the time you say that you stop fishing with your nets?—If taken up then, they would never put them down again, for it is so expensive, unless they were allowed to stop all the year. There is another of the same kind made, called a putt; and then there is an instrument at the end of that putt, which is a small basket which will stop eels and shrimps.

If the fence months were strictly attended to there would be an end of that style of fishing, would there not?—Yes, there certainly would.

You said, before, that you did not commence fishing till the month of March?—We don't, and that is full soon enough, as there is nothing to be got till it comes to the month of April.

When would you recommend the fence season to begin; when would you stop fishing?—We should not fish longer than the 10th or 12th of September.

You don't think an earlier period necessary?—No, not for saving the fish; the middle of September would be the best time to leave off; but the putcher season is the best season.

Do you think the breed of salmon is much decreased since you have been a fisherman?—It has decreased every year since I knew it.

How do you account for that?—We account for it by its being a good deal owing to those putchers.

Do you know of any other illegal mode of fishing that is adopted upon your river?—Not on this side of Gloucester.

Do you suppose that the same time for fishing would suit the fisheries at and below Gloucester as you have stated would be the best where you live?—Yes, as well there as any where else. The fish generally go up the river as far as they can, and it would be the same injury to the one place as to the other.

What is the size of the meshes of the net you use in general?—They are three inches from knot to knot.

You mean in the square, with the corners all stretched out when pulled tight?—Yes; three inches from knot to knot, but it is not drawn tight.

Is there any difference between the size of the mesh at the sides and the middle of the net?—Yes, it is finer at the sides than the middle of it, which is called Codlin net; the smallest is three inches, and the largest is about half an inch more.

You think that the best size for the meshes of the net?—Yes.

What is the general size of the salmon you take by such nets?—From four pounds to twenty pounds; at this time of the year it is generally from ten to twelve pounds weight.

What number of putchers do you think are in use in your neighbourhood?—On the other side of the river from us there are upwards of 9,000 of them, in about five miles distance up the river; they are all on one side of the river. They are all taken down within the Duke of Beaufort's liberty by his order.

What

J. C. Frampton, Esq. called in; and Examined.

J. C. Frampton, Esq.

16 May, 1825.

HAVE you any knowledge of any river in the west of England connected with the salmon fishery?—I know the river *Ax*.

Do you know whether the salmon fishery has of late years decreased in that river?—It has very much decreased.

To what causes do you attribute this decrease?—To the destruction of the salmon by the poachers.

Do you mean when they are in or out of season?—Out of season.

What are the fence months which are fixed for the river *Ax* at present?—From the middle of November to the middle of April.

Do you apprehend that this is the most proper period, as applicable to the river Ax?—I think not.

What period do you recommend as being preferable?—I should recommend that the fence months should commence as early as the 10th of October, and continue till the middle of April.

Should you think that if the fence months were fixed to commence on the 15th of September, and to terminate on the 1st of March, (although not precisely what you have stated it should be,) they would nevertheless be very beneficial to the river Ax?—I should think they would. I should observe that salmon is in season in the river Ax, although not in other rivers.

Should you think that if a proper period for fence months were strictly observed, and poaching put down, salmon fishing in the river Ax might regain its former state?—I have no doubt it would.

Are there any other causes than that of poaching which interfere to prevent the prosperity of the salmon fishery in that river?—There are impediments, which are placed in different parts of the river; there is a mill (and indeed there are several mills,) on the river Ax, where a great deal of small fry are destroyed; they sometimes take them by bushels.

By what means?—By letting off the water from the mill-hole, and they are caught by the grating.

Mr. *Richard Morris*, called in; and Examined.

Mr. Richard Morris.

WHERE do you reside?—At Holme Lacy, in the county of Hereford.

What is your profession?—I am a salmon fisherman.

In what river?—In the river Wye.

With what part of the river Wye are you acquainted?—From Hereford to Chepstow.

Has the salmon fishery on the river Wye decreased of late years?—Yes, it has.

To what do you ascribe such decrease of the fishing in the river Wye?—I ascribe it to different causes.

Can you state them?—The first cause I allude to is, that there is a place called New Wear, which was formerly erected for the use of iron works, where there has been for the last fifteen years nothing carried on.

What is it you call New Wear?—It is a wear built all across the river.

At what place is it situated?—Between Ross and Monmouth, with a lock on one side of it for the use of the navigation.

What is the difference of height between the surface of the water below that wear and the surface of the water above it?—Five feet ten inches.

Has the wear a slope from the top to the bottom?—Yes, in one part next the lock.

What may be the distance from the top of the wear to the bottom of this slope?—Thirty feet.

Is there any water running over the wear at all times?—No, it is dry over the slope if the water in the river get a little low.

But there is a lock for the use of the navigation?—Yes.

Is that kept shut at all times except for the passage of vessels?—Yes.

When there comes a flood in the river does it go over the whole of this wear?—Yes.

What depth of water may be running over this wear when there is a flood?—Eight feet of water in a high flood.

In what way do you consider that this wear has been the principal cause of diminishing the fishery?—By stopping the fish from coming up the river.

Do you mean stopping salmon when they are in season, or when ascending for the purpose of breeding?—When coming up for breeding.

Mr. Richard Morris.

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Do you consider that salmon cannot go above this wear except when there are floods in the river?—Yes.

Are floods in the Wye so rare that there are not enough of opportunities for the salmon to ascend?—Not at all times.

But does this wear affect the fishery during the fishing season?—It is a great deal owing to the lowness of the water in the river.

How long has this wear existed?—Past my time.

What are the purposes to which this wear is now applied, as you say that the iron works for which it was originally constructed are no longer in use?—It does no good that I know of, except stopping the fish for the sake of the fishery below it.

There is a salmon fishery then below the wear?—Yes.

To whom does it belong?—To government; it formerly belonged to Lady Griffin.

The government acquired the property that belonged to Lady Griffin?—Yes.

Do you know the rent of that fishery?—The one side is 40*l.* and the other side is 50*l.*

Do you know whether that wear be expensive in its repairs annually?—Yes; very expensive.

Do you know what the repairs may annually cost?—I cannot say what the expense may be.

Do you imagine that if this wear were removed it would be injurious to the navigation of the river?—No; it would be better.

Then is it your opinion that this wear can be of no use except to the fishery immediately below it?—No, except the iron works were set a going again.

To whom do the iron works belong?—To government.

What are the other causes to which you attribute the decrease of the salmon fisheries in the Wye?—Because they are fishing continually all the winter round; and great quantities of salmon are taken by spearing in the upper part of the river.

Do you mean to state that they take fish when they are out of season?— Yes.

In that part of the Wye with which you are acquainted?—Yes; between New Wear and the tideway.

Do you mean to say that there is not so much taking of salmon out of season above the wear?—No; not so much below, but there is a great deal above.

At what time does the fishing season commence in the Wye?—Upon my word I cannot say what time.

At what time would you commence?—About the month of February or March, or thereabouts.

Do you rent the fishery?—Yes.

From whom?—From the late Duchess of Norfolk.

At what time do you think that the salmon fishery ought to stop, in order to promote as much as possible the breed of the fish?—About the latter end of September.

At what time do you think (supposing the fishing season to cease in September) that it ought to commence?—About the beginning of March.

Do you state this as your opinion, because you think that those periods would best promote the breed of salmon in the Wye?—Yes.

Is it your opinion that if the new wear were removed, and the fence time were made what you recommend, and if that fence time were observed and poaching prevented, there would be a great increase of the salmon fishery in the river Wye?—Yes; no salmon smelts ought to be taken by any manner of means; it has become a daily trade.

In what way are the salmon smelts taken in the Wye?—By nets, flies and bank lines.

Are they taken for amusement, or profit?—Both for profit and amusement.

In what way are the salmon disposed of which are taken for profit?—They are carried about in baskets, and sold to gentlemen in and about the town of Hereford, and all other towns adjoining the river, by hundreds and by thousands.

At what time do salmon fry come down the river Wye?—Chiefly in the month of April.

And partly in March and in May?—Very few, but chiefly in April.

Is there any machinery for taking of eels upon the Wye with which you are acquainted?—No.

What sort of nets are they by which the fry or the salmon smelts are taken?—By what are called trammel nets.

Describe them?—They are made about two feet high, with twine.

How are they used?—They are dragged down the river.

What is the size of the mesh?—Half an inch; and likewise by nets called cast-nets.

What

Mr. Richard Morris.

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What size of meshes have they?—From half an inch.

What is the size of the mesh which you use for the salmon fishery?—In general, about an inch and three-eighths from knot to knot; it is rather too large. An inch mesh is the smallest that is used, by reason that it will take great quantities of dace, which destroy the salmon spawn.

Do you never take any salmon fry in the nets of the size of mesh you decribed?—No.

Never?—No, never; the mesh is too large to stop any, by reason that they never grow to the size in fresh water.

John Hughes, Esq. called in; and Examined.

John Hughes, Esq.

WHERE do you reside?—At St. Asaph, in the county of Flint.

Are you acquainted with any river in North Wales connected with the salmon fisheries?—With nothing more than the salmon fisheries in the river Elwy and the river Clwydd.

What opportunities of information have you had respecting the salmon fisheries in those two rivers?—I have had frequent opportunities of information from persons who have actually seen salmon destroyed; I have never actually seen the salmon destroyed myself.

What do you mean by destroyed?—By the spearing of salmon, and catching them in baskets likewise.

Do you consider that the salmon fisheries in the river Elwy and Clwydd have decreased?—Very sensibly.

Within what period?—Within eight or ten years.

To what causes do you attribute that decrease?—To the dreadful poaching which has taken place for the last few years.

At what season is it carried on?—Through the whole year, to a great extent.

What are the periods during which the salmon fishery is carried on in those rivers according to law?—In the months of July, August and September, and I have known it in the first week of October, but not much later.

Do you know the annual value of the salmon fisheries in one or both of those rivers, either formerly or at present?—I cannot answer that.

Do you believe the value to be considerable, or to be chiefly for the amusement of the persons possessing those salmon fisheries?—The fisheries are not rented, but kept in the possession of the proprietors, and the produce disposed of in the neighbourhood, to persons trading to and from Liverpool.

What are the fence months applicable by law to the rivers Elwy and Clwydd?—I am not aware that it is fixed by law.

What would you recommend as the period to be fixed by law, during which it should be declared illegal to take salmon in the rivers Elwy and Clwydd?—I should say from the first fortnight in September till May following.

Till what time in May?—I should say till the beginning of May.

Are there in the rivers Clwydd and Elwy any obstructions which prevent the salmon ascending to the upper part of the river?—There are.

With reference to the Elwy, state what obstructions there are?—There are mill-dams.

Are those mill-dams very high, so as to prevent the salmon ascending?—They are not high.

Do you believe that salmon are taken in the mill-streams connected with those mills?—I do.

Should you think it advantageous that gratings should be placed, so as to prevent the salmon entering those streams in ascending and descending?—Certainly, at each extremity, so as to prevent the salmon quitting the main stream.

Is there any gap or sluice in any of those mill-dams by which the salmon or the salmon fry can ascend or descend in the river?—No, there are not.

Can you mention any particular mill and watercourse in which baskets have been annually set, by which great numbers of salmon fry have been taken in quitting the river for the sea?—Yes, Pontriffydd mill.

Do you wish your observations, as to mills and mill-dams, to be applied generally, and to convey your opinion to the Committee, that you think them all requiring regulation?—I do.

Should you consider that such regulations might be carried into effect for the safety of the salmon fisheries, without any injury to the proprietors of the mills?—Undoubtedly I should.

Martis, 17° *die Maii*, 1825.

THOMAS FRANCIS KENNEDY, ESQUIRE,

IN THE CHAIR.

The Rev. Dr. *John Fleming*, called in; and further Examined.

Rev. Dr. John Fleming. 17 May, 1825.

YOU have stated that a river terminates at that point where it reaches the mean level of the sea; do you know of any other method of determining that limit?—I am not aware of any other method of determining that limit that can at all be relied upon. The saltness of the water I have heard hinted at, as being a test that might be employed; but the degree of the saltness of the water at the head of the estuary must be influenced by the quantity of fresh water poured in by the river; and I have determined, in reference to the Tay (and I presume the observation applies to all other rivers,) that the fresh water floats upon the surface of the salt water; so that the fresh water at the surface, in some parts of the estuary, would indicate the existence of the river, while the salt water at the bottom would indicate the presence of the sea. The growth of sea weeds has likewise been considered as indicating the presence of salt water, and consequently as pointing out the place where the sea ends and the river begins; but the sea weeds are influenced in their growth not merely by the presence of salt water, but by the presence of a suitable soil; so that there may be salt water in an estuary fitted for their growth, but in the absence of a suitable soil no sea weeds may be found.

Do you consider that towards the head of the estuary the erection of stake nets would interrupt the channel?—I have, upon a former occasion, stated it as my opinion, that stake nets should never be permitted to extend farther from the shore than to the low-water mark of neap tides. This limitation would, therefore, preserve the entire channel of the river at the head of the estuary free from obstruction.

Do you consider, that the nearer the river the less efficient stake nets are, and the more efficient and suitable is the coble net mode of fishing?—Yes; towards the head of the estuary, and where the river begins to assume its true character, the stake net ceases to be so suitable an engine for catching fish, as it is known to be farther seaward in the estuary, and where the stake net ceases to be a suitable engine the coble net becomes efficient.

The fish that are caught at the mouth of the river on their way upwards must occasion a proportional loss to the river proprietors; then would not stake nets be injurious in that respect?—If stake nets caught only those fish which are on their way to the rivers, the use of such engines would certainly occasion a corresponding loss in the river fisheries; but stake nets are most successful at that season of the year when there are many fish not disposed to enter the river, and the same objection against stake nets in the estuary, injuring the fisheries in the river, may be considered as applicable to all fishing stations except the uppermost in the river; and that objection, in reference to the lower fisheries in the river, is even stronger than that which applies to the stake nets, because at the fishing grounds near the mouth of the river the fish taken have entered the river, and are on their way to the higher streams.

James Jardine, Esq. called in; and Examined.

James Jardine, Esq.

WHERE do you reside?—In Edinburgh.

You are a civil engineer, I believe?—Yes.

Have you seen a copy of the bill pending in Parliament for the preservation of the breed of salmon?—Yes.

Have you perused the clause in that bill providing for the erection of certain gratings or fenders at the extremities of mill streams, for the purpose of preventing salmon entering those streams?—Yes.

Does your experience enable you to give an opinion to the Committee as to the possibility of carrying that provision of the bill into effect, without injury to the interests of the proprietors of mills and manufactories?—I think it might.

Be so good as state to the Committee the principles which you think apply to those gratings or fenders, by which the interests of the proprietors of mills and manufactories may be sufficiently guarded?—I think, if the head of the mill-stream at the dam-head be made of sufficient width and depth, the grating may be made of such

James Jardine, Esq.

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such dimensions, and so placed as to allow the water to run out of the river into the mill-stream at the same level it did before the grating was so placed.

Do you conceive that the bars of such grating being interposed affect the quantity or force of the water flowing towards the mill or manufactory?—I think it would not, if done in the manner I have described.

What rule could you lay down by which you think that the interests of the proprietors of mills and manufactories may be protected?—I am of opinion, the opening through which the water runs out of the river into the mill-stream should be made at least as much wider or deeper than it is at present, as the space to be occupied by the bars of the grating.

Can you lay down any principle by which compensation may be given, stating the proportion in which it is necessary to increase the waterway in width and depth?—I could, if the thickness of the bars of the grating and the distances between them were given, and also the width and depth of the head of the mill-stream.

Supposing the openings between the bars not to exceed two inches, and the bars themselves not to exceed half an inch in thickness, in what way would you state that compensation should be given for the space occupied by those bars?—Supposing the bottom to remain the same, and not to be deepened, the width would require to be made as much greater than it is at present as would make up for the thicknesses of all the bars of the grating, together with an additional width to be allowed for the greater difficulty the water would have to flow through those gratings, depending on the velocity of the mill-stream.

Would you recommend that the grating should be placed in a vertical position, or in a sloping position?—In a vertical position.

Upon what ground do you give a preference to the vertical position?—In that position the grating occupies the least possible portion of the waterway of the mill-stream, and is the cheapest.

But supposing it to be sloped with the head down the current, and the bottom higher up the current, would not leaves or rubbish in that way rather tend to come to the surface than to go down and choke the bottom of the grating?—I have tried them both ways, and upon the whole I think the vertical one is the best.

What shape would you recommend for the construction of the bars of the grating?—I should recommend that they be placed in a vertical, and not in a horizontal position; that both sides of each bar should be made parallel; that the horizontal section of the front of each bar next the river should be made like a pointed gothic arch.

The bars being made of the shape you recommend, do you consider that it can be made of any requisite strength, by increasing its breadth, without increasing its thickness?—Yes, of any requisite strength, by increasing its breadth, and not its thickness.

The Committee infer, from what you have stated, that you think the bars ought to be placed in a vertical and not in a horizontal position?—Yes, I think they ought to be placed in a vertical position.

Do you consider that the principle you have stated, upon which compensation may be given for any obstruction to the water arising from those gratings, is of universal application?—Yes.

Do you consider that, in general, carrying such a principle into effect would be attended with considerable expense?—I think, in general, the expense would be small; there are some cases however where it would be considerable; namely, where there are large works of masonry at the head of the mill-stream at present, and where it would be expensive to take down one side of the masonry to widen it; I allude particularly to a case in point; the head of the King's Lead, near Perth.

While you consider the principle to be universal in its application, do you consider that its precise application in each case must be ascertained according to the circumstances of that case?—Yes.

And consequently, that it is not possible to lay down a precise rule, otherwise than by laying down general principles, the application of which must be ascertained in each case?—I would not say that a general rule could not be laid down, but it would be so complicated that it would be easier to determine each particular case than to apply the general rule.

George Hogarth, jun. Esq. called in; and Examined.

G. Hogarth, jun Esq.

WHERE do you reside?—In Aberdeen.

Have you had much experience in salmon fisheries in different rivers in Scotland?—Yes; few more so.

G. Hogarth, jun. Esq.

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In what particular rivers?—The North Eske, the water of Bervey, the rivers Dee, Don, Ythan, Ugie, Spey, Findhorn, Nairn, Ness, and a good many fishing stations in that neighbourhood upon the Frith, the Conon, the Shinn, the Coil, and a good many other small rivers that run into the Dornoch, or frith of Tain as it is called; Brora, Helemsdale, Berrydale, Thurso, Navir, and one or two small waters to the westward of them, such as the Foss.

For how long a period have you been so engaged?—For all my life, or about thirty years.

Have you paid particular attention to the natural history of the fish and their habits?—My attention has been more turned to the taking of fish than otherwise; but since this inquiry commenced I have paid particular attention to it. Last year, when I saw that it was doubted that grilse were young salmon, I set about investigating the thing, and the first step I took was, at this time twelve months, when the smelts or fry were going down the river, I caused a number of them to be marked, by cutting off a particular fin which is called the mort fin, which I suppose means the dead fin; in the course of the month of June several of these grilses were found without that fin, from which I inferred that they were the fish that had been marked; it was in the month of July when we got the first one as grilse.

In what month was it that you cut the fin off?—In the month of May; it was during the time that the smelts or fry were going down to the sea. This year there has been already got three salmon marked in the same way.

Do you consider those three to have been part of those you had marked originally as smelts or fry?—Certainly I do. I was going to add, that one of those fish that was marked in the Don was found in the Dee; and I mention this as it is said that these fish are completely local. I took another method to endeavour to prove it: in the month of September there were ten or twelve grilses caught, (for the express purpose of making experiments,) which were put into a salt-water pond for that purpose; there were unfortunately some very high tides this season, which allowed several to escape, but there were three still when I left home alive, which I had taken out and examined, along with other competent judges, who were decidedly of opinion that they were salmon. I also, during the last winter, paid particular attention to the spawning beds in the river Don; I had them looked at frequently, and had spawn taken from them occasionally to examine the state it was in, and I found them advancing gradually; the first particular change I observed in the roe was two black specks appearing; after which I had some of it taken and put into phial bottles, and with frequent changes of water it came into life. I can show a sketch of it, taken by an artist in that state. They lived in the bottle, and appeared very vigorous for about three weeks, by my changing the water frequently; after which they became very restless and uneasy, and I suspected they wanted food, but they would not *eat* any thing; and, in fact, they died when they had attained the length of an inch.

Did you ever put any of the *ova* into salt water?—Yes, I did.

And what happened?—It never came into life.

Do you infer from that experiment that spawn deposited in the sea would not come into life?—I think it leads to that inference, I also took one of the fish which had been hatched in a phial containing fresh water, and put it into one containing salt water; it immediately showed symptoms of uneasiness, and died in a few hours.

What inference do you draw from that experiment?—That the salmon could not exist in the sea at so early a period of its existence.

Have you ever seen the appearance of salmon fry rising from the spawning beds?—No; never. I caused a particular examination to be made into the spawning beds, but could never detect any of them after having come into life. It appeared to me, that as soon as they came into life, they had been swept into the river below, but could not be seen.

In what situations do you generally find those spawning beds?—Those that I had the opportunity of examining were in the Granham mill lead. I had an opportunity, previously, of seeing the old fish upon the spawning beds, and one I particularly remarked was a grilse accompanied by a salmon; the grilse was a female and the salmon was a male. I did not observe that the male did any thing in digging up the gravel, but the grilse was occasionally very actively employed in that way.

You have, therefore, no doubt, in your own opinion, that grilse and salmon are the same fish?—I have no doubt, nor had I ever any.

G. Hogarth, jun. Esq.

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What are the engines used for killing salmon upon the rivers with which you are particularly concerned?—I am concerned at present with the Dee, the Don, the Spey and the Findhorn. Upon the Dee, the coble net is the only engine used for taking of fish; upon the Don, the coble net, the hang net and cruives; upon the Spey, the coble net and cruives; that is, upon the part with which we are concerned, for there are different modes used upon the upper part of that river; they are what are called stream fishing and cairn fishing. Upon the Findhorn, it is coble net fishing entirely that is used.

Can you describe what is called the cairn fishing?—The cairn fishing is merely a parcel of stones erected as a kind of jetty, from which a small net, or hang net, is suspended, by which the fish are entangled. I cannot describe stream fishing so as to make the Committee understand it, but will give them a sketch thereof. *Vide Pl. XI*

Can you furnish the Committee with a return which will show the produce of any of the rivers with which you are acquainted?—Yes; I can. There is a return, showing the yearly produce in weight and number of salmon and grilse taken during the last thirty-five years upon the river Dee and Don. [*Witness handing it in.*]

How is this return made up?—From the books of the company with which I am connected.

To what company do you allude?—Messrs. Forbes, Hogarth & Co. I can give in a more particular account, if required, relating to the Dee and the Don. I have here also a statement, showing the produce in the Findhorn, in barrels, since the year 1790. [*Handing it in.*]

Are all these accounts taken in the same way from the books of your company?—Yes.

Have you also a similar statement, showing the produce of the river Ness?—Yes; here is a similar statement, from the year 1790 to the year 1811 inclusive.

And have you also similar statements of the other rivers?—Yes; here is a statement, showing the produce of the river Nairn, from the year 1797 to 1817 inclusive; and another, showing the produce of the Neither, Don and Cruives, since the year 1790; a statement showing the produce of the Raick, Midchingle, and Pit and Foords, fishing upon the river Dee, in barrels, from the year 1790. Here is also a statement, showing the produce of the fishing station of the Raick, at two periods of seven years, with the values; and also a statement showing, on an average, the produce of sundry rivers and fishing stations up to the 1st of February, the 14th of February, the 1st of March, and the 1st of April respectively.

[*The following are the various Statements which this witness alluded to, and which he delivered in.*]

FIRST STATEMENT, showing the Yearly Produce in Weight and Numbers of Salmon and Grilses, taking during the last 35 Years, upon the Rivers Dee and Don.

Upon an Average of Years.	Weight of Salmon in Barrels.	Weight of Grilses in Barrels.	Total Weight of Salmon and Grilses.	Number of Salmon.	Number of Grilses.	Total Number of Salmon and Grilses.
River Dee:						
From 1790 to 1800 -	641	140	781	21,260	14,980	36,240
– 1801 to 1812 -	499	159	658	18,962	17,013	35,975
– 1813 to 1824 -	478	306	784	19,120	32,742	51,862
River Don:						
From 1790 to 1800 -	744	212	957	23,312	19,928	43,240
– 1801 to 1812 -	429	182	611	15,229	17,108	32,337
– 1813 to 1824 -	340	298	638	12,665	28,012	40,677

N. B.—A barrel of salmon or grilses contains 400 lbs.

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SECOND STATEMENT, showing the Produce of the Findhorn in Barrels, since the Year 1790.

Year.	Salmon in Barrels.	Grilses in Barrels.	Total Barrels Salmon and Grilses.
1790 - -	153	15	168
1791 - -	281 1/4	24	305 1/4
1792 - -	346 3/4	12 1/4	359
1793 - -	131 3/4	28	159 3/4
1794 - -	286 1/2	11 1/2	298
1795 - -	112 1/2	46 3/4	159 1/4
1796 - -	117	3 3/4	120 3/4
1797 - -	117 3/4	20 3/4	138 1/2
1798 - -	280 3/4	9 3/4	290 1/2
1799 - -	153 1/4	60 1/4	213 1/2
1800 - -	132 3/4	36	168 3/4
	2,113 1/4	268	2,381 1/4
1801 - -	151 1/2	132 3/4	284 1/4
1802 - -	279	6 1/4	285 1/4
1803 - -	121	58 3/4	179 3/4
1804 - -	161 1/2	79 3/4	241 1/4
1805 - -	261 1/4	58 1/4	319 1/2
1806 - -	170 3/4	51 3/4	222 1/2
1807 - -	393 1/4	71 1/4	464 1/2
1808 - -	194 3/4	46	240 3/4
1809 - -	222	19 1/4	241 1/4
1810 - -	176 1/2	15 1/4	191 3/4
1811 - -	127 3/4	12 3/4	140 1/2
1812 - -	79 3/4	57 1/4	137
	2,339	609 1/4	2,948 1/4
1813 - -	169 1/4	30	199 1/4
1814 - -	241	86	327
1815 - -	134 1/2	88	222 1/2
1816 - -	182 3/4	214 1/2	397 1/4
1817 - -	371 3/4	35	406 3/4
1818 - -	134 1/4	39 1/4	173 1/2
1819 -	94	41 1/2	135 1/2
1820 -	57 1/2	126 1/4	183 3/4
1821 -	133 3/4	116	249 3/4
1822 - -	172 1/2	43	215 1/2
1823	99	35	134
1824 -	85 3/4	72	157 3/4
	1,876	926 1/2	2,802 1/2

Average of 11 Years:

Salmon in barrels - - - 192 7/11

Grilses in barrels - - - 24 4/11

Total barrels salmon and grilses 216 3/11

Average of 12 Years:

Salmon in barrels - - 194 11/12

Grilses in barrels - - - 50 9/12

Total barrels salmon and grilses 245 8/12

Average of 12 Years:

Salmon in barrels - - 156 4/12

Grilses in barrels - - - 77 2/12

Total barrels salmon and grilses 233 6/12

THIRD STATEMENT, showing the Produce of the River Ness, in Barrels, from the Year 1790 to 1811 inclusive.

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Year.	Salmon in Barrels.	Grilses in Barrels.	Total Barrels Salmon and Grilses.
1790	105	13 1/2	118 1/2
1791	174 1/4	11 3/4	186
1792	179 3/4	22 1/4	202
1793	142 1/4	56 1/4	198 1/2
1794	285	22 1/4	307 1/4
1795	155 3/4	14 3/4	170 1/2
1796	81 1/2	7	88 1/2
1797	106 3/4	29 1/4	136
1798	170 1/4	16	186 1/4
1799	104	33	137
1800	104	18 1/2	122 1/2
	1,608 1/2	244 1/2	1,853

Average of 11 Years:

Salmon in barrels - - - 146 2/11

Grilses in barrels - - - 22 2/11

Total barrels salmon and grilses 168 4/11

Year.	Salmon in Barrels.	Grilses in Barrels.	Total Barrels Salmon and Grilses.
1801	119 1/2	156 1/2	276
1802	129 1/2	13 3/4	143 1/4
1803	38 1/2	11 1/4	49 3/4
1804	48	4 3/4	52 3/4
1805	75 1/2	21 1/2	97
1806	81 1/2	22	103 1/2
1807	77	17	94
1808	77 1/4	7 1/4	84 1/2
1809	72 3/4	10	82 3/4
1810	40 1/4	6 1/4	46 1/2
1811	32 3/4	9 3/4	42 1/2
	792 1/2	280	1,072 1/2

Average of 11 Years:

Salmon in barrels - - - 72

Grilses in barrels - - - 25 5/11

Total barrels salmon and grilses 97 5/11

FOURTH STATEMENT, showing the Produce of the River Nairn, and the Fishing Station of Drum, situated near its Mouth, in Barrels, from the Year 1797 to 1817 inclusive.

Year.	Salmon in Barrels.	Grilses in Barrels.	Total Barrels Salmon and Grilses.
1797	61	41 1/2	102 1/2
1798	70 1/4	13 1/4	83 1/2
1799	40	33 3/4	73 3/4
1800	26 3/4	18 1/4	45
1801	28	56 1/4	84 1/2
1802	39 3/4	9	48 3/4
1803	15 3/4	5 3/4	21 1/2
	281 1/2	178	459 1/2

Average of 7 Years from 1797:

Salmon in barrels - - - 40 1/7

Grilses in barrels - - 25 3/7

Total barrels salmon and grilses 65 4/7

Year.	Salmon in Barrels.	Grilses in Barrels.	Total Barrels Salmon and Grilses.
1804	14 3/4	17	31 3/4
1805	18 3/4	12 1/2	31 1/4
1806	17 3/4	35 1/2	53 1/4
1807	18 3/4	8 5/4	27 1/2
1808	16 1/2	8 3/4	25 1/4
1809	32 3/4	7 3/4	40 1/2
1810	22 1/4	3 1/4	25 1/2
	141 1/2	93 1/2	235

Average of 7 Years from 1810:

Salmon in barrels - - 20 2/7

Grilses in barrels - - - 13 2/7

Total barrels salmon and grilses 33 4/7

(*continued*)

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Year.	Salmon in Barrels.	Grilses in Barrels.	Total Barrels Salmon and Grilses.
1811 - -	11 3/4	7	18 3/4
1812 - -	8 1/2	23 1/4	31 1/4
1813 - -	15 1/2	9 1/4	25 1/4
1814 - -	23 1/4	22 1/2	45 3/4
1815 - -	11 1/2	28 3/4	40 1/4
1816 - -	15	79 1/2	94 1/2
1817 - -	20 1/4	10	30 1/4
	105 3/4	180 3/4	286 1/2

Average of 7 Years from 1811:

Salmon in barrels - - 15 1/7

Grilses in barrels - - - 25 5/7

Total barrels salmon and grilses 40 6/7

FIFTH STATEMENT, showing the Produce of the Neither Don and Cruives Fishings on that River, in Barrels, since the Year 1790.

Year.	Salmon in Barrels.	Grilses in Barrels.	Total Barrels Salmon and Grilses.
1790 - -	302	63 1/4	365 1/4
1791 - -	386 1/4	91	477 1/4
1792 - -	1,000	103 1/2	1,103 1/2
1793 - -	410 3/4	288	698 3/4
1794 - -	975 1/4	131 1/2	1,107 1/4
1795 - -	641 1/4	332 1/2	973 3/4
1796 - -	820 3/4	147 1/4	968
1797 - -	726 3/4	678 1/4	1,405
1798 -	1,755	164 1/4	1,919 1/4
1799 - -	570 1/2	212	782 1/2
1800 - -	600 1/4	127	727 1/4
	8,189 1/4	2,338 1/2	10,527 3/4
1801 - -	540 1/2	384 1/2	925
1802 - -	641	170 1/4	811 1/4
1803 - -	300 3/4	100	400 3/4
1804 - -	262 3/4	77	339 3/4
1805 - -	261	140	401
1806 - -	262 1/2	290 1/4	552 3/4
1807 - -	664 1/2	129 1/4	793 3/4
1808 - -	388 3/4	221 1/4	610
1809 - -	817 3/4	164 1/2	982 1/4
1810 - -	435 3/4	157 3/4	593
1811 - -	323 1/2	69 3/4	393 1/4
1812 - -	250	284 3/4	534 3/4
	5,148 1/4	2,189 1/4	7,337 1/2
1813 - -	398	211 3/4	609 3/4
1814 -	413 1/4	446 1/4	859 1/2
1815 -	563 3/4	337	900 3/4
1816 - -	668 5/4	717 1/2	1,386 1/4
1817 - -	409 1/2	229 1/4	638 3/4
1818 - -	223 1/4	189 1/2	412 3/4
1819 - -	254 1/2	189 1/4	443 3/4
1820 - -	193 3/4	368 3/4	562 1/2
1821 - -	363 1/4	182 1/4	545 1/2
1822 - -	194 3/4	163 1/2	358 1/4
1823 - -	146 3/4	350	496 3/4
1824 - -	251 1/2	196 1/2	448
	4,081	3,581 1/2	7,662

Average of 11 Years:

Salmon in barrels - - 744 5/11

Grilses in barrels - - - 212 6/11

Total barrels salmon and grilses 957

Average of 12 Years:

Salmon in barrels - - - 429

Grilses in barrels - 182 5/12

Total barrels salmon and grilses 611 5/12

Average of 12 Years:

Salmon in barrels - - - 340 1/12

Grilses in barrels - - - 298 5/12

Total barrels salmon and grilses 638 6/12

N. B.—A barrel contains 400 lbs. Amsterdam weight; five barrels being nearly a ton.

SIXTH STATEMENT, showing the Produce of the Raick, Midchingle and Pott, and Foord's Fishing on the River Dee, in Barrels, from the Year 1790.

G. Hogarth, jun. Esq.

17 May, 1825.

Year.	Salmon in Barrels.	Grilses in Barrels.	Total Barrels Salmon and Grilses.
1790	395 3/4	150 1/4	546
1791	683 1/2	100	783 1/2
1792	920 1/4	74 1/2	994 3/4
1793	360 1/2	143 3/4	504 1/4
1794	897 1/4	124 1/2	1,021 3/4
1795	617 3/4	172 1/2	790 1/4
1796	577 1/2	43 3/4	621 1/4
1797	487 3/4	312 1/2	800 1/4
1798	1,110 1/2	59 3/4	1,170 1/4
1799	501 1/2	202 1/4	703 3/4
1800	501 3/4	156 1/2	658 1/4
	7,054	1,540 1/4	8,594 1/4
1801	584 1/2	219 3/4	804 1/4
1802	649	106 1/2	755 1/2
1803	441	114 1/2	555 1/2
1804	254	176 1/4	430 1/4
1805	402 1/2	147	549 1/2
1806	356 1/2	161 1/2	518
1807	718 3/4	203 1/2	922 1/4
1808	645 1/4	151 1/2	796 3/4
1809	661 3/4	137	798 3/4
1810	691 3/4	138 1/2	830 1/4
1811	380 1/4	38 3/4	419
1812	212 1/2	313 3/4	526 1/4
	5,997 3/4	1,908 1/2	7,906 1/4
1813	449	268 3/4	717 3/4
1814	547 1/4	424 3/4	972
1815	669 3/4	315 1/4	985
1816	829 1/2	582 1/2	1,412
1817	669	249 3/4	918 3/4
1818	356	193 1/2	549 1/2
1819	344 1/4	229 1/4	573 1/2
1820	305 3/4	382	687 3/4
1821	516 3/4	207 1/4	724
1822	357 1/2	172 1/2	529 3/4
1823	247 1/2	382 1/2	630
1824	447	271 1/4	718 3/4
	5,739 1/4	3,679 1/2	9,418 3/4

Average of 11 Years:

Salmon in barrels - - - 641 3/11

Grilses in barrels - - - 140

Total barrels salmon and grilses 781 3/11

Average of 12 Years:

Salmon in barrels - - - 499 9/12

Grilses in barrels - - - 159

Total barrels salmon and grilses 658 9/12

Average of 12 Years:

Salmon in barrels - - - 478 1/12

Grilses in barrels - - - 306 7/12

Total barrels salmon and grilses 784 10/12

N. B.—A barrel contains 400 lbs. Amsterdam weight, five barrels being nearly a ton.

SEVENTH STATEMENT, showing the produce of the Fishing Station of the Raick of Dee, at two periods of Seven Years, with the respective Values during different parts of the Season, calculated at the Prices obtained at Billingsgate for Aberdeen Fish in 1824; also showing the Expense of catching and conveying said Produce to Market.

FIRST PERIOD.

YEAR.	Produce from the commencement of the Season up to 1st April.		Produce during April.		Produce during May.		Produce during the remainder of the Season.		Produce of Grilses during the Season.		Produce in Barrels.	Value.		
	Sal. lbs.	*R.*	*Sal. lbs.*	*R.*	*Sal. lbs.*	*R.*	*Sal. lbs.*	*R.*	*Grl. lbs.*	*R.*	*Barrels.*	£.	*s.*	*d.*
1786	2,340	1/11 6/12	10,652	1/10 4/12	27,050	1/ 8/12	51,356	/10 6/12	22,716	/6 5/12		5,533	13	10
1787	9,400	–	15,460	–	33,010	–	127,744	–	5,094	–		9,831	11	–
1788	4,372	–	7,442	–	30,954	–	56,739	–	18,240	–		5,743	5	10 2/12
1789	3,414	–	15,938	–	35,512	–	63,636	–	13,584	–		6,853	1	2 4/12
1790	17,490	–	19,382	–	19,134	–	82,920	–	43,958	–		9,374	16	5
1791	16,876	–	23,240	–	45,466	–	94,270	–	29,454	–		11,157	2	6 4/12
1792	34,068	–	60,860	–	78,758	–	80,694	–	25,000	–		17,380	13	3 8/12
	87,960		152,974		269,884		557,539		158,046		3,066 3/400	65,874	4	1 6/12

	£.	*s.*	*d.*		
The expense of catching a barrel, or 400 pounds of salmon or grilses, in the Raick in 1824, was £. 3. 2*s.* 1 1/2 *d.* which, on the above produce, amounts to	9,677	1	8 6/12		
The expense of conveying a barrel of salmon or grilses to market from Aberdeen, including ice and boxes, is £. 1. 14*s.* which, on the above produce, amounts to	5,212	4	1		
				14,889	5 9 6/12
			£.	50,984	18 4

SECOND PERIOD:

YEAR.	Produce from the commencement of the Season up to 1st April.		Produce during April.		Produce during May.		Produce during the remainder of the Season.		Produce of Grilses during the Season.		Produce in Barrels.	Value.		
	Sal. lbs.	*R.*	*Sal. lbs.*	*R.*	*Sal. lbs.*	*R.*	*Sal. lbs.*	*R.*	*Grl. lbs.*	*R.*	*Barrels.*	£.	*s.*	*d.*
1818 - - -	1,232	1/11 $\frac{6}{12}$	6,202	1/10 $\frac{4}{12}$	17,590	1/ $\frac{8}{12}$	71,276	/10 $\frac{6}{12}$	59,064	/6 $\frac{8}{12}$	- - - -	6,385	2	4
1819 - - -	6,128	–	13,694	–	31,038	–	53,758	–	76,662	–	- - - -	7,993	17	3 $\frac{8}{12}$
1820 - - -	2,864	–	8,816	–	20,032	–	48,122	–	117,932	–	- - - -	7,539	5	7 $\frac{8}{12}$
1821 - - -	8,890	–	15,674	–	36,092	–	74,162	–	64,154	–	- - - -	9,260	10	7 $\frac{4}{12}$
1822 - - -	3,578	–	16,488	–	24,784	–	49,938	–	47,794	–	- - - -	6,705	1	9 $\frac{4}{12}$
1823 - - -	1,361	–	5,393	–	18,035	–	32,113	–	97,828	–	- - - -	5,709	6	11 $\frac{8}{12}$
1824 - - -	7,098	–	24,205	–	33,350	–	60,356	–	82,810	–	- - - -	9,648	8	3 $\frac{4}{12}$
	31,151		90,472		180,921		389,725		546,244		3,096 $\frac{113}{400}$	53,241	12	11

	£.	*s.*	*d.*		
The expense of catching a barrel, or 400 pounds of salmon or grilses, in the Raick in 1824, was £. 3. 3 *s.* 1 $\frac{1}{2}$ *d.* which, on the above produce, amounts to - - - -

G. Hogarth, junr. Esq.

17 May, 1825.

EIGHTH STATEMENT, showing, on an Average of Ten Years, the produce of sundry Rivers and Fishing Stations, up to 1st of February, the 14th February, the 1st of March, and 1st of April respectively.

	Caught before the 1st February.	Caught before the 14th February.	Caught before the 1st March.	Caught before the 1st April.
	lbs.	lbs.	lbs.	lbs.
Navir - - from 1790 to 1799, both included	2,524	3,316	4,543	7,917
Thurso - - from 1790 to 1799, both included	2,285	2,569	3,881	7,273
Helemsdale from 1790 to 1799, both included	- -	- -	276	3,733
Brora - - from 1790 to 1799, both included	- -	- -	194	2,568
Shin, including Colerain, from 1791 to 1800, both included - - - - - - - -	- -	- -	1,011	9,019
Connon - - from 1790 to 1799, both included	7	26	468	7,366
Ness - - - from 1790 to 1799, both included	12,167	16,903	18,576	25,061
Nairn, including Drum, from 1805 to 1814, both included - - - - - - - - -	- -	- -	- -	42
Findhorn - from 1815 to 1824, both included	- -	- -	33	1,247
Spey - - from 1815 to 1824, both included	- -	359	2,008	9,640
Don - - - from 1815 to 1824, both included	1,276	2,382	4,100	9,065
Dee - - - from 1815 to 1824, both included	1,468	2,896	5,534	14,442

Can you furnish the Committee with a document similar to this last one which you have now produced, containing the produce at the other different parts of the season; or in other words, a complete document for the whole season?—Yes, I can, but it will require some considerable time.

Be so good as to send such a document complete, including also this part of the year which this other statement contains, as soon as you can; that is, a statement containing every month of the year?—Yes, I will.

[*The following is a Letter addressed to T. F. Kennedy, Esq. Chairman, by the Witness.*]

Sir, Aberdeen, 17th July 1825.

YOUR letter of the 11th came only to hand yesterday, it having been sent to Aberfeldy. In my letter of the 21st ult. I mentioned that some of the partners of the company with whom I am connected were of opinion that their interest might suffer by too minute a detail of the produce of the fisheries in which they are concerned being published, and which, I hoped, would be received as a sufficient reason for not forwarding a monthly return of the produce of those fisheries; but wishing to be prepared, in case it should be insisted upon, I commenced making it out, when I found an insuperable difficulty, which I was not previously aware of, which I will endeavour to explain as concisely as possible. The overseers of the different fisheries are in the practice of keeping books, in which is inserted daily the quantity of fish taken; these, at the end of the fishing season, are transmitted here, and the whole yearly produce is carried from them, in *one* sum, into a regular set of books; after which the daily accounts, being of no further use, are thrown aside, and are not now forthcoming. The overseers, besides keeping a day-book, are required to write the company once a week, and state the quantity of fish caught during the preceding one, which is entered in a note-book kept here; from these note-books I made up the return which has been the cause of so much discussion, and I thought that from the same source I would have been able to complete it; but upon commencing the task, I found that a change in the plan of keeping the account takes place at different periods, but generally about the middle of June in each year; previous to that time the weight of the fish is stated, and afterwards only the number; the reason of this I will also explain. Up to the period mentioned the fish were all boiled and pickled for the London market, and were weighed daily on delivery into the boiling-houses; but after that time the fish were salted, and were not weighed when caught, the quantity being reckoned by the number of barrels filled by them, and of which the account was not rendered to us until the close of the fishing season; during the period that the fish were salted, the overseers in their weekly letters only mentioned the number of fish taken, which was noted in the same way.

I hope that this explanation will prove satisfactory to you, and that you will, in any observations you may please to make on my evidence, state, that I find that I am not possessed

possessed of documents that will enable me to make up, throughout the *whole* year, a *monthly* statement of the produce of the fishings with which I have been concerned; this I pledge my honour to be the case, and, should the House of Commons think it necessary to summon me before them, is what I must state. The other paper that I was desired to give in, I am sorry to say, I have not yet been able to procure; Mr. Menzies, as I stated formerly, assured me that he would send it as soon as Mr. Anderson returned *home*; whether this gentleman has yet returned I cannot say, but I have not received the paper; I have written, urging strongly the necessity of forwarding it without delay. Allow me to assure you, that I remain, with the greatest respect,

G. Hogarth, jun. Esq.

17 May, 1825.

Sir, your most obedient servant,

Geo. Hogarth, jun.

Thos. F. Kennedy, Esq.

Has the produce of the rivers with which you are connected increased or decreased of late years?—The rivers with which I am connected at present have not decreased in the total weight, although they have decreased in the quantity of salmon produced; but the quantity of grilses has increased so as to compensate for it. The quantity of salmon has decreased, but the quantity of grilses has increased so as to make up for the deficiency of weight.

To what do you ascribe that particular state of the rivers with which you are connected, and in reference to which you have given in those statements?—I believe the cause of the decrease in salmon is owing to the too assiduous and close manner of fishing that has taken place; the increase of the grilses I cannot attribute to any other cause than that the rivers are less poached now than they were formerly.

Have you found the decrease of salmon and the increase of grilses to be progressively decreasing and increasing every year?—I have; the grilses have been progressively increasing since the year 1790, with some few exceptions; but the returns show that the increase has been gradual from the time that these returns have been made out; there is a gradual increase of the grilses, and a decrease of the salmon, shown in these returns. I may (as corroborating what I have said) observe that it is owing to too close fishing that the size of the salmon has decreased, as well as the number.

Is that applicable to all the rivers in which you are engaged?—Yes, the whole of them; it is applicable, as far as I know, to all the rivers in Scotland north of the Tay; I am not acquainted with that river, nor with any of the rivers to the south of the Tay. I should correct my evidence, so as to say that the Ness and the Nairn have decreased in quantity; for although the quantity of grilses be equal to what it was, yet it is not so great as to make up for the deficiency of the salmon.

To what do you attribute the increase of the number of grilses?—I can attribute it to no other cause than to this, namely, that the rivers are not so much poached as formerly. At the commencement of the late war a number of the idle and disorderly people were taken out of the country; agriculture received an impulse at the same time, and the people found encouragement to turn their attention to that pursuit; so that there has been less poaching, and the grilses have increased annually: within these last ten years the grilses have more than doubled in point of weight, upon all the rivers with which I am concerned.

You say that you fish principally with coble nets in your fishings?—Yes, almost wholly so.

Do you consider that mode destructive to the salmon fry?—No, I don't, provided the meshes of the net be of a sufficient size.

What sized mesh do you use?—For what we call the bosom of the net, it is an inch and a quarter on the side of the square; but if you speak to a fisherman upon that, he would call such a mesh two inches and a half.

Do you think that meshes of that size are destructive of the salmon fry?—I do not; it is with the greatest difficulty that the salmon fry can be taken ashore with a mesh of that kind.

Have you ever observed, in your fishing, that many fry have come ashore?—No, it is scarcely possible to take the fry on shore with a mesh of that kind; it requires particular exertion in the fishermen to do so.

Do you consider the spawning beds to be injured by the working of the coble net?—I should suppose that the spawning beds might be so placed as to be injured by the nets, but I do not consider that the coble-net fishing injures the spawning beds to any considerable extent, and for this reason, that there are very few spawning beds in that part of the river in which coble nets are used. The salmon, if left to themselves (or rather if they don't meet with artificial or natural impediments), all wish to go to the upper part of the river, and to tributary streams, to deposit

 their

G. Hogarth, jun. Esq.

17 May, 1825.

their spawn, and in those situations the coble-net fishing is not at all used. I may mention that upon the Dee, which is perhaps one of the best calculated rivers for net fishing in the kingdom, there is not, upon the first three miles of the river, above half a mile that is swept by the coble nets. It is the practice to confine the fishing to particular stations, and to work at those stations till the fish come up to them; therefore the nets don't sweep the whole of those three miles; indeed not above half a mile of the bottom of the river, within this space, is touched by the nets. In those three miles, at least six-sevenths of the whole fish that are caught upon the Dee are got.

How many fishing stations are there for nets in that space?—Upon the Raick fishing, which is the lowest fishing station, there are two that are used in Spring, neither of which are above a hundred and fifty yards long. Upon the next fishing, which is the Midshingle, there are two, of, perhaps, about the same length. The next is the Pot and Fords; there are four fishing stations, each of which will be about the same length as the others. I think that is all that are within the space I speak of. In the Raick, during the summer months, we occupy more stations near the mouth of the river, when the fish don't come up so far as they do in the Spring months; at least they are more shy in coming up. Upon the Don there is still less space occupied by the coble nets, and less of the bottom swept by nets.

When the salmon are waiting upon the coasts, do you know if they are frequently destroyed in great numbers by grampuses or seals?—We seldom see such a thing in our part of the country, or any part of Scotland that I am acquainted with: it is quite a curiosity to see porpoises there, the seals are still scarcer; I have seen one or two in the course of the season, but not more; they are troublesome to us; sometimes they come into the nets and take the fish, but they are far more hurtful by scaring the fish than in any other way.

Does this apply to the whole coast where you have been engaged in fishing?—Yes.

Do you consider that the salmon appearing upon the coast are there with an intention of making for the rivers?—Certainly.

Do you suppose that all the salmon which appear upon the coast are inclined to make for the rivers?—I do.

Do you suppose that any of those salmon return to the sea without pushing up the rivers, if they are not prevented by nets or otherwise, after they come into the estuary?—While they are within the estuary, or the influence of the tide, they very frequently return to the sea, if not intercepted upon their return, but after going up into the river they don't go down.

What is the close time observed on the rivers with which you are acquainted?—On the Dee and upon the Don we commence on the 20th of September, and end on the 12th of December. On the Spey the close time commences on the 26th of August, and ends on the 30th of November. On the Findhorn it also commences on the 26th of August, and ends the 30th of November. We are not at present connected with any other rivers.

What do you consider the best close time for the rivers in which you are engaged, for the protection of the fish?—I would suppose from or about the beginning of September till about the 1st of February.

Do you consider fish to be in a state of perfection during the seven months of the year, that is, from the time of the commencement on the 1st of February to the 30th of August, or during the open time?—Certainly, during all that time.

They are then in a state to go to the market?—Certainly; I don't mean to say that there are not bad fish to be caught within that time, as all the kelts are still in the rivers, and don't leave them before the middle of April.

Why do you recommend the opening of the rivers on the 1st of February?—Because at that time the spawning season is over, and a number of well conditioned fish have entered the river, and there is no difficulty at all in allowing the kelts to escape. There is no necessity for the fishermen killing the kelts.

Do you think that the close time you recommend would be suited to all the rivers in Scotland?—I don't say that by any means, but I am of opinion that a general close time would be the best thing to be adopted, and therefore I am inclined to give and take. There are some rivers which would suffer considerably in not opening before the 1st of February; the Ness for one, the Navir and the Thurso, all of which, it will be seen by the returns, yield a good deal of fish before that time, and therefore they must suffer.

Do you then consider the time you have mentioned, as that which you call to give

give and take, as to these rivers, upon the whole the best time?—Certainly I do. The Don would suffer very considerably by leaving off at that time, because she yields fish late. The Dee will not. I am perfectly satisfied that unless there be some compromise among the proprietors of the rivers it is impossible to get a general close time. *G. Hogarth, jun. Esq.* 17 May 1825.

Upon the whole, you think that that time is best calculated for the whole of the rivers with which you are acquainted?—I do.

Mercurii, 18° *die Maii*, 1825.

THOMAS FRANCIS KENNEDY, ESQUIRE,

IN THE CHAIR.

George Hogarth, junior, Esq. again called in; and Examined.

HAVE you any particular reasons for recommending that the rivers should be opened on the 1st of February?—I think I stated yesterday that the reason was, in the first place, that the spawning season was over, and that there was a considerable quantity of good conditioned fish in most of the rivers by that time; and I would now add, that those fish which enter the rivers during the month of January would be deteriorated by lying five or six weeks in fresh water. *G. Hogarth, jun. Esq.* 18 May, 1825.

The Committee suppose you send most of your fish to the London market?—The whole of them.

How do you send them up?—Packed in boxes, and covered with ice.

Do you find that they keep better in that season than later in the year?—Certainly they keep better in the spring than during the heat of summer.

What is the weekly close time generally observed in the rivers with which you are acquainted?—The Sabbath day, or from twelve on Saturday night to twelve o'clock on Monday morning, except in the cruive fishings. I think the cruives on the Don are opened at six o'clock on Saturday evening, but I cannot speak positively about it; I think it is from six on Saturday evening to sun-rising on Sunday morning: it is only the cruives themselves that do not fish during that time. The fishing attached to the cruives keeps the usual weekly close time of twenty-four hours, that is, from twelve o'clock on Saturday night till twelve o'clock on Monday morning.

Supposing the weekly close time for all fisheries to be extended from sun-set on Saturday night to sun-rise on Monday morning, how would that affect the property of the salmon fishings?—It would be attended with very serious loss to the lower heritors; it would be depriving them of so many hours of their present time of fishing. Just now, the close time is twenty-four hours, and of course if it were lengthened, it would be depriving them of part of the benefit they have just now; it would be, upon an average, nine hours in a week taken from the nether proprietors, which would amount to one-tenth of the rental. I shall illustrate that by quoting one particular fishing—the Duke of Gordon's fishing upon the Spey; we pay him 7,000*l.* a year as rent, the expenses of fishing are 4,000*l.* making 11,000*l.*; and unless we get the 11,000*l.* at market, of course we must be losers. If you take off one-sixteenth part of the value of the produce at market, or of 11,000*l.* you will find that it is within a trifle of 700*l.*; now 700*l.* is ten per cent of the Duke's rent.

Do you consider that the upper proprietors of fishings would be benefited by that extension of close time?—They certainly would be benefited, because they would get a part of the fish that went up on the Saturday night and Sunday morning, but I don't think that they would be benefited to the extent that the lower proprietors would be injured.

Are there any stake nets used in or about the fishings in which you are engaged?—There are none used by us in the fishings in which we are engaged. There are some in the neighbourhood of the Don, and some in the neighbourhood of the Spey, but not upon the property of the Don, nor of the Duke of Gordon.

Do you consider that your fishings are injured by those stake nets?—I certainly do think that the nether Don fishing is injured by the stake nets in that neighbourhood.

Are you acquainted with the stake-net mode of fishing?—Perfectly well.

G. Hogarth, jun. Esq.

18 May, 1825.

Supposing the stake-net mode of fishing were practised all along the coast, and within half a mile of the mouth of the river on each side, should you be disposed to give the same rent for that river fishing which you would do if the stake nets were not in use upon the coast?—Certainly not; most decidedly not.

You stated yesterday that when the salmon came into the estuary, or upon the coast near the river, that such salmon if they don't ascend the river, and if they are not intercepted by the fishers, would again return to the sea: do you mean to state that in such cases the salmon leave the coast altogether?—If I made that reply, I must have misunderstood the question; I thought the question had merely applied to estuaries, and that the fish, after ascending the estuary, if it did not find the river in a state such as to induce it to enter it, it would float down with the tide, and keep floating backwards and forwards with the flood and ebb tide until intercepted by the nets. Upon the sea coast again, the fish don't go off with the tide, but generally go along with the tide; with the flood tide they go to the southward, and with the ebb tide they fall back to the north, but if they come within the reach of our nets, they don't get leave to make many turns of that kind.

Do you conceive that by any improvements, or extension of the modes of fishing now in use where you are connected, an increased quantity of salmon could be permanently supplied?—I do not; on the contrary, I think that the fishings are much too assiduously fished at present, and have been so for many years.

You have stated that the size of the fish have been decreasing for several years?—Yes, they have.

To what do you attribute that decrease in size?—To their not living to the same age they did formerly; we very seldom now see a fish above two years old.

Do you consider that that is owing to the river being over fished?—Yes, certainly.

What would you recommend in order to improve the size of the fish?— I would recommend that the fishery should cease at an earlier period of the season, and that the fishery on the coast be given up at the same time that the fishing ceases in the rivers. At present it is the practice to fish the sea as late as any fish can be got. It is conceived that there is no law to prohibit it, and it is continued as long as any fish are to be found upon the coast. Before sea fishings were prosecuted to the same extent they are now, a number of fish used to be left every year uncaught.

Do the fish, if there were a flood taking place in the river before the middle of October, generally enter to supply the spawning beds?—If a flood don't take place before that time, or before the cold weather sets in, the fish leave the coast, and I suppose deposit their spawn in the sea, (where although I believe the spawn would be abortive,) yet those fish, from their being where they can get plenty of food, soon recover after spawning, and supply the rivers in the spring with fine large fish.

Would you then recommend that the fishing season should cease earlier than the 1st of September?—I said yesterday that the 1st of September should be the extreme to which the fishing season should be carried. I think if that time were adopted, the rivers would recover themselves; especially if the breeding fish were protected afterwards by some legislative means.

Do you mean to say that they fish later than the 1st of September now?—Yes, much later. In the Dee and the Don they fish till the 20th of September; it was formerly the 19th, but when the old style changed with the end of the century, they took the 20th; and at Montrose they fish till the 10th of October. It is the same in the Deveron and the Tweed.

Do they leave off fishing upon the coast at the same time?—No, they don't.

How long do they fish upon the coast?—As long as they can get any fish to catch.

You have stated this respecting the Tweed, and the Eske and the sea fishings; is that from your own personal knowledge or from report?—With regard to the Eske, it is the proper time of giving over, and I know it well, as we were long the tacksmen of these fishings.

With respect to the Deveron?—We never were tacksmen of the Deveron, but it is a notorious fact; and as to the Tweed, there is a special Act, authorizing the fishery to be carried on until that time.

Do you know no example of an existing law which prohibits fishing from the 20th of August being enforced?—We have an instance of it ourselves; at the Ness, we endeavoured to fish there longer than the 26th of August; it is a number of years ago;

ago; I think about the year 1795, although I am not positive as to the time; but we were found fault with, and were obliged, by the sentence of the Court of Session or of the sheriff, to confine our operations to the 26th of August.

G. Hogarth, jun. Esq.

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Are you aware of any law which prevents the fishing in the sea at that season?—No, I am not; but I should suppose the same law applies; it is not, however, put in force.

You have stated your connection with a very great number of rivers in the north of Scotland, amounting in number to between fifteen and twenty?—Probably that number.

It is, as lessee of the fisheries in those rivers, that you are connected with them?—Certainly.

In those rivers with which you are now connected, can you state to the Committee at what season the fry descend towards the sea?—During the months of April and May.

Do they descend at the same period in the rivers with which you were formerly acquainted, but with which you are not now connected?—I believe so.

Do you wish the Committee to understand that generally, with respect to all the rivers as to which you have given evidence, the fry descend to the sea in the months of April and May?—I do.

I think you stated, that in certain rivers you would recommend the fence or close time to commence on the 1st of September, and to terminate on the 1st of February?—On all the rivers that I know.

Do you consider that, from and after the 1st of February, there are no unspawned fish in any of those rivers?—I don't think there are.

Are there in those rivers, after the 1st of February, a considerable number of spawned fish, or fish which are called kelt fish?—A great many.

Are those kelts, in point of fact, taken along with the seasonable fish in the beginning of the season?—Certainly; they are drawn on shore in the nets.

In the month of February, what do you consider to be the proportion between the sound fish and the kelts which are drawn on shore?—I cannot positively say, nor can I give an opinion upon the subject; for this reason, the fishings with which I am connected are the lower fishings upon the rivers, where kelts are not found in great quantities; it is the smaller fishings, in the upper parts of the rivers, where the kelts are got, and as I am not connected with these, nor in the way of seeing the nets drawn, I cannot venture to give an answer respecting them. I would, however, state one fact: I was at the cruive fishing upon the Don on the 6th of May, when there were upwards of ninety kelt fish in the mill lead of Grandholm; they came in at the upper sluice, and there being a grating at the lower end of it, they could not escape. I gave instructions to the overseer to have them caught, and turned over the hack into the river.

You have stated that the number of kelts, in the rivers with which you are acquainted, in February, is greater in the upper than the lower fishings with which you are connected?—Yes.

But in any of the lower fisheries, are there no kelts taken in February?—Yes, but very few; I have seen them selling frequently, but whether they come from the upper or the lower fishings I cannot take upon me to say.

Have you any cause of knowledge respecting what is done with the kelts in the upper fisheries?—No.

You have stated that the proposed weekly close time would be very injurious to the lower fisheries?—Yes.

In estimating the injury that would arise from such weekly close time, have you taken into view merely the loss which would be sustained immediately, or do you also take into view the probability (as that may be tried) of promoting the breed of salmon from that regulation?—I take into view the loss that is to arise in the mean time to the lower proprietors, and I cannot see in what way the breed of salmon can be benefited by that regulation, because those fish going up would be all taken either by the fly or the spear in the course of that week in which they go up into the river.

You mean the upper part of the river?—Certainly.

Do you think it desirable that the proprietors in the upper part of the river should not take fish to a moderate extent?—Certainly not; I think every man should avail himself of his own fishing.

Do you not think that by allowing a small number of fish to go up weekly to the upper fisheries, the proprietors in whose grounds the salmon are drawn will be more likely to protect the breeding fish, than they are if they derive no advantage whatever

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from the fishery?—I am at a loss how to answer the question, because it is impossible for me to enter into any man's feelings: an amateur may be interested if he caught a salmon or two more in a week than he does at present, whereas a merchant, or any person who looked to pounds, shillings and pence, would sit down to calculate what he was to gain by it.

In estimating the loss of 700 *l.* a year upon the Duke of Gordon's fishery, from the observance of this weekly close time, do you take into view the immediate loss, without any consideration of the benefit that might arise from that weekly close time?—It is the immediate loss that I take into view; I do not see what ulterior improvement is likely to take place from the measure proposed to the fisheries in general.

The Committee think you stated, that the observance of the proposed weekly close time would be a benefit to the upper proprietors?—Certainly.

But that it would not be equal to the loss sustained by the other proprietors in your opinion?—Certainly not.

If that benefit conferred upon the upper proprietors were to induce them to protect the breeding fish, should you consider that an advantage to the lower proprietors?—Certainly.

The Committee think you stated, that you had no concern in any stake nets in that part of the country with which you are connected?—I have none.

Your connection is entirely with the river fisheries?—That is not the case; each of the rivers with which I am connected have a very considerable extent of sea coast attached to it, which we fish constantly with the net and coble, and it is there we take a great proportion of fish.

At what distance, at high-water mark, are you able to fish with the net and coble?—I think the net is generally one hundred and forty fathoms in length, and the ropes at each end are at least that length, (but I cannot positively say the exact length of the ropes that are used); I know, however, they are lengthened or shortened, according as the fish are far from or near the shore. It is a most efficient engine; it is the Seine net.

Do you fish with it at high or low tide?—At all times; it is one of the most effectual modes of taking fish that I know of, in particular stations.

In the cruives which you say are rented by you, belonging to the Duke of Gordon, do you observe the Saturday's slap?—Certainly.

With regularity?—Regularly; they are regulated cruives.

Jovis, 19° die Maii, 1825.

THOMAS FRANCIS KENNEDY, ESQUIRE,

IN THE CHAIR.

George Hogarth, junior, Esq. again called in; and Examined.

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DO you wish to correct any portion of the evidence you gave in your former examination?—I do.

State the particular point?—In enumerating the modes of fishing upon the Findhorn, I forgot to state that there was a yair fishing upon that river.

You stated the other day that you had marked some of the salmon smolts, and that they had come up grilses; can you distinguish the salmon smolt from the grilse smolt, or do you consider them the same?—I consider them the same.

In the beginning of the season, what proportion of foul fish are taken in comparison to the clean fish at the uppermost fishery your company holds in the river Don?—I cannot answer that question; they are never brought to us, and I am not in the practice of frequently attending the fishers drawing their nets.

Do you occasionally attend them when drawing their nets?—Not very frequently.

But when you have attended them, what proportion have you seen in the uppermost fishery in a season?—I don't recollect that I ever saw a foul fish taken out of the water, except during last winter that we fished for them for the purpose of marking them.

But do you not know that, in reality, a great number of foul fish are taken and sold in the market of Aberdeen?—I have seen foul salmon selling in the market of Aberdeen.

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You have stated that the orders of your company to the fishermen are to put the foul fish into the river?—Certainly.

Do you believe that they obey your orders strictly?—I don't know how to answer that question; I can only say, that if we found that they did not obey those orders they would be turned off.

Have you ever studied the nature of the seals and the porpoises?—I have never had much opportunity of seeing them; they are not frequently seen with us.

How then do you come to the conclusion that they don't destroy many salmon?—I have never said so; I only said that they were not upon our part of the coast in any considerable quantity.

The Committee think you stated that the company you belong to is of the firm of Forbes, Hogarth & Co.?—Yes.

You are the principal tacksmen of the river Don, are you not?—Yes, at this time we are considerable tacksmen of the nether Don; we have one half of the nether Don, and an eighth part of the cruives.

Have you and your company any interest in the fisheries of the river Don, independently of your lease?—I myself have none.

Have your other partners?—Some of them have; the company rent these fishings in the same way as they would do from other proprietors.

Is there at present any action depending in the courts of law, at the instance of the proprietors of the river Don fishery, for putting stake nets upon the coast?—There is.

Be good enough to state to the Committee how far you, or any of the company of which you are a partner, are connected with that action?—We are all connected in the action; we are promoters of the action along with others.

Of course, being promoters of the action, you come in for some share of the expenses, do you not?—Unquestionably. Those proprietors who are partners of the company, but not the company themselves.

How many of the members of this company are proprietors?—There are five.

Have these same gentlemen a considerable property in this fishery?—Yes, they have.

To what amount?—I may say about one fourth of the nether Don fishing, and a small share in the cruive fishing.

Does your name appear as one of the parties in that cause?—I believe it does; I think it does; I cannot speak positively to the fact, but I believe it does.

Is it a fact, that the produce of the fisheries in the river Findhorn has fallen off?—I think not.

You stated that the fisheries on the river Ness and Nairn have fallen off?—Yes.

And those upon the Findhorn not?—Yes.

To what causes do you ascribe the different states of those rivers?—The Nairn is a very small river, and it is much easier getting the fish that comes about its mouth caught than those near a large river; and it is also much easier to destroy the breeding fish that are in a small river than a large one. To these two causes, I ascribe the falling off of the Nairn more than the Findhorn. As to the Ness, there are some very peculiar circumstances which account for the decrease of the fish in that river: Some years ago there were close cruives upon the river, which stopped the whole of the fish; none of them escaped up except during a great flood, which made the produce of course much greater than when a part of them were allowed to pass up, as they have done since those cruives were removed. That is one cause that I assign for the falling off of that water; another cause is, the number of stake nets that are situated upon the frith contiguous to her mouth.

Is there not a yair at the mouth of the river Findhorn, not far from the town of that name?—Yes, there is.

Be so good as state to the Committee the form of a yair, and the materials of which it is composed, and the extent of ground it incloses?—The form is nearly two sides of a square, one side runs off direct from the land, and the other turns up the course of the river; it may not be exactly of the form of a square, but it turns off at a particular angle, so as to suit the ground; the materials of which it is constructed are stakes driven into the sand, and wattled with wicker work.

Is that wicker work very close at the bottom?—Yes, it is.

Is it so close that all small fish left by the tide must remain in these yairs?—I suspect that it is. I must say that I never saw it drawn myself, but I don't think it a good mode of fishing.

Do you happen to know that a considerable quantity of salmon fry are taken in this yair?—I don't know of any.

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Do you know that they are not taken?—No, I do not.

Do you know of a yair in the Cromarty Frith, belonging to Mr. Monroe, of Navir?—It is a good many years since I was upon the Cromarty Frith. There were yairs near the mouth of the river Conon at that time.

Are there not now existing a good many yairs in the same situation?—I believe it is the case, but I cannot say positively.

Your company do not rent any of those yairs?—No.

From your former experience there, are those yairs constructed in the same manner as the one at Findhorn?—The very same.

Has your company any fisheries in the Cromarty Frith?—None.

Have you, or the company of which you are a partner, had any sea fishings at any time?—We have very extensive sea fishings attached to the four rivers which we are now tenants of.

Have you at any time had any stake nets in those fisheries?—Yes.

Upon what points?—There was one which we erected not very far from the mouth of the Don, and there were two not very distant from the Spey. We once put up one in the estuary of the Findhorn, but it was said to be detrimental to the navigation of the river, and it was removed. Those are the only stake nets we ever had to do with.

Do your company employ now any stake nets in your fisheries?—None.

Do you know of a stake net at Broughhead, near Findhorn?—I never saw it myself, but I know that one existed there.

Do you happen to know if that stake net has been successful?—I understand it has been successful; I speak from information, and not of my own knowledge.

You have stated that your company, in conjunction with the proprietors of the river Don, are now carrying on an action at law, to put down certain stake nets?—Yes.

Is this stake net at Broughhead one of those which you are desirous of putting down?—Yes, it is; it is not included in the same action as the one at the mouth of the Don, but an action was raised against it, and it is now what the lawyers call asleep.

By this, the Committee suppose they are to understand that the delay of the proceeding in this action is in consequence of a wish to await the decision of the other one now going on?—I dare say that is the truth of the matter.

Is not the Findhorn the nearest river to Broughhead?—Yes, it is.

Can you state the distance of the Broughhead stake net from the river Findhorn?—I have heard it estimated at five miles; I dare say it may be from four to five miles.

And notwithstanding this stake net, you have stated that the fishery upon the Findhorn has not fallen off?—Yes; but I would also state that that stake net has only existed two years, and I think that the return will show that the Findhorn has fallen off within those two years. I would rather refer to the return which is now upon the table, than to my own memory upon the subject.

Have you visited the fishery of the Findhorn this season?—No, I have not.

Does it consist with your knowledge that a considerable number of salmon fry have been destroyed by the coble nets in the Findhorn for some previous years?—No, it does not consist with my knowledge at all; I never heard of such a circumstance being mentioned or hinted at before.

Previous to the action being brought by the proprietors of the Don fisheries for putting down the stake nets, was there not a stake net established between the Don and the Dee?—Never.

Are you perfectly certain of this fact, that there never was a stake net between the Don and the Dee?—I will answer that, at any rate, there has not been one within these thirty-five years.

Do you know a person of the name of John Davidson?—Yes, perfectly well.

Did he not occupy a stake net at one time between the Don and the Dee?—I have stated that there never existed one there.

Was you once in partnership with John Davidson in a stake-net fishery?—John Davidson is a joint tacksman of the nether Don fishing, and of course had a part of the stake net that was upon the north side of the Don.

What was the name of that stake net?—I don't know that it had any particular name.

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How far was it from the mouth of the Don?—I suppose the distance may be about two miles, or a mile and a half.

Is that stake net now in use?—It is not.

Be so good as state why it was abandoned?—It was taken down at the time that the action was raised against the other stake nets. We did not think we could go into court with a very good grace to put down other people's stake nets, while we had a stake net of our own. I may also mention the cause of putting it up, which was this: the people that had the fishing contiguous to the nether Don fishing put up a stake net close upon the March, and to prevent their getting fish on one side we put up a stake net close to theirs.

Was the stake net you allude to as fitted up upon the March, to the north of your stake net?—Certainly.

During the time that you fished with the stake net, was there no diminution of the fishing in the river Don?—The stake nets have only existed in that neighbourhood for three years; this may be the fourth season, but I am not positive: and I think the return shows a very considerable falling off during those three years.

You spoke of this action which is now going on, has there been any agreement entered into between the proprietors of the Don and Dee fisheries for the payment of the expenses of this action?—Yes, I understand there has.

Can you state to the Committee the annual produce of this stake net, belonging to the company, you have just now alluded to?—I cannot; it was only up one year, and I don't know the produce.

Was it successful?—No, it was not: I believe it barely paid the expenses of the erection and what the men's wages would amount to.

Do you think that the great mass of the fish roaming about upon the coast in the sea make directly for the rivers, and go up those rivers?—If the rivers be in such a state as to be fit to receive them, I believe they would all go up the rivers as they come upon the coast; but the water, during the summer months, is frequently so low and heated, that a number of them keep floating backwards and forwards with the tide until a land flood takes place, when a great burst of them go up at once.

You have stated that every fish is more or less in spawn or melt?—Yes, after being fairly recovered from spawning.

Do you mean the Committee to believe, that fish in the spring clean from the sea, which cannot by the process of nature spawn for four months afterwards, seek the river with the avidity they would do when ready for spawning?—Most certainly I do; and I may state one fact in corroboration of it, namely, that during the months of May and June, particularly from the middle of May to the middle of June, there are more salmon caught in the river than at any other season. At that time of course the fish are very far from being near spawning.

You have generally stated that you consider the decrease of the fish in some of the rivers you mentioned, as owing in a great measure to the stake nets; and that you are acquainted with the river Tweed; do you know that a great decrease of salmon has taken place in that river?—I have not been able to get any evidence to satisfy myself that there has been any decrease in that river; I have seen no other evidence than what Mr. Wilson gave before this Committee, and it appeared to me to be so very general, that I could not take upon myself to say there was a falling off in that river.

Then you do not believe there is any decrease of salmon in the river Tweed?—I have not sufficient evidence to judge.

Do you know that any stake nets are placed in or near that river?—I know there are no stake nets in that river, nor within twenty or thirty miles of it.

You have already given some reasons for the diminution of the fishing in the river Ness; do you not consider that the Caledonian Canal has been prejudicial to that river?—I cannot pretend to say that that is the cause. I have heard it stated that the fry get into the Caledonia Canal and are lost; but if the Committee will refer to the statement I gave in, they will find that the quantity of grilses have increased upon the Ness, and therefore one would suppose that the Caledonian Canal did not destroy more smolts than were formerly destroyed, as the quantity of grilses have increased. In fact the Ness shows much the same state as the other rivers with which I am acquainted, although the fishing is pushed further with her and with the Nairn than any other. I am quite satisfied that all our rivers are over fished, even those as to which the total weight of fish has increased; upon the whole the salmon has decreased, and it is only owing to the grilses having increased

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that the weight of fish caught is nearly the same. We are able, by our engines, to take the whole of the fish that are bred in the rivers that we are tacksmen of; we could take the whole of them by the means we use without stake nets.

Do you not think that the destruction of the foul fish or kelts is one reason for the diminution of the large fish?—It certainly must be one reason, if they be destroyed they must of course make a diminution.

You stated generally, that although the salmon have decreased in size, the quantity of fish have so augmented that the same weight is produced to the fishermen?—Yes; except the rivers I mentioned, the Nairn and the Ness, which have both fallen off very much.

Does not the increase of salmon, in point of weight, take place only when they are in the sea, and not in the rivers?—I am quite satisfied that the sea is the natural element of the salmon, and it is there, and there only, they thrive.

Does not the salmon fall off when they go into fresh water?—If a salmon remain any considerable time in fresh water it falls off.

Is not a fresh-run salmon from the sea more valuable than one that has been in a river for some time?—If a salmon lies for any considerable time in a river, it becomes less valuable; but as to a fish that has been in a river not above a week, I don't suppose it would be possible to know any difference between the one and the other.

But in all cases where a salmon has been in a river for a fortnight or three weeks, or a month, is not that fish deteriorated?—I have no hesitation in saying, that a fish that lies three weeks or a month in the river would be deteriorated.

Are not the fish that are caught nearest the mouth of the river in general the best fish?—They are in general the largest; but the reason is obvious, the small fish escape through our nets and are taken above; and the fish caught upon the lower fisheries average more than those caught in the upper ones in point of size, in consequence.

Upon the same principle, therefore, do you not consider that a stake net placed in the sea a considerable distance from the mouth of the river will generally take larger and better fish than in the river?—No, I do not.

Do you think that stake nets in that situation will ever catch a foul fish?—No; I do not.

The legal fishing season upon the Spey closes on the 26th of August?—Yes.

Does your company ever fish upon the Spey after that time?—We fish in what is called the tug-net-shot, and in the sea, sometimes until the 10th of September.

Is the tug-net-shot above the tide?—No, it is in the tide-way.

Then you fish beyond the 26th of August in the river?—During last year we did. In explanation, I may say that we continued fishing in the sea as usual. I ordered a vessel to go down to the Spey, and bring up what fish were caught in the sea; our overseer there, finding that the cargo was likely to be very small, took the liberty to take a few shots in the river, for which he was very severely reprimanded when it came to our knowledge. It is not our practice to fish in the Spey during the close time, and it being done upon that occasion during the night time, made it worse; I certainly regretted much that it had happened, and the man was very severely reprimanded for it.

Is this the only instance, consistently with your knowledge, in which your company have fished beyond the 26th of August in the river?—It is.

You stated yesterday that the cruives in the river Spey are regulated?—Yes.

Will you state the general regulations of those cruives upon the Spey to which you referred?—The hacks must be made of a certain width, but I am not prepared to give these regulations correctly.

You stated that the cruives on the river Spey are regulated cruives, will you state the regulations to which you refer?—The cruives must be placed upon the channel of the river; the hacks must be made of a certain width, I believe three inches, (but I don't speak positively as to that,) and the inscales must be opened upon a Saturday night at least for twenty-four hours, but I am not certain whether it be from sunset on Saturday night till sun-rise upon Monday morning, or only during the hours of the Sabbath.

Is that what you understand generally is the regulated time?—I am only acquainted with one or two regulated cruives, and they have different regulations; they have both been settled by references or law-suits.

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The bottom of your cruives is placed in the channel of the river?—Our servants have orders to place it so, but I cannot say that it is so.

You have stated that the Saturday's slap is regularly observed?—I expect it is so.

Is any person in your employment stationed upon the cruive on Sundays?—Yes.

How is this man employed?—To see that no person comes there to steal, or to do any thing that is wrong.

Is that man placed close to the slap?—Not that I know; I never saw the man upon the dyke.

Could you not inform the Committee who the man is that generally takes that station upon a Sunday?—No, I could not; he is a man appointed by the overseer of the fishing.

Is Robert Paulin the overseer of your fishery upon the cruive?—He is upon the cruive part of the fishery.

Have the upper heritors access to inspect your cruives at all periods?—Whenever they choose to demand it of the Duke of Gordon or his factor, but our instructions from the Duke's factor are not to allow any person to go upon the cruive dyke without their leave.

The Duke of Gordon is proprietor of the fishing to which you allude?—Yes.

Is it within your knowledge that persons employed by the upper heritors have been prevented having access to inspect those cruives?—Never, after application having been made.

Then they must first apply to the Duke of Gordon?—Yes, or his factor. I suppose the Duke himself does not trouble himself much about it.

Do you think, supposing any irregularity to exist in the management of those cruives, that a previous notice given to the parties interested, gives security to those who think that irregularity does exist, that they shall be able to detect it?—It is not certainly so effectual a security as if they were allowed to come and look at them at all times without notice. In this case there are two parties; there are the people, who may be supposed to be the aggressors, which are the fishermen, and the Duke of Gordon, (who can have no interest in the matter at all,) and the Duke or his factor are the people who give permission to have the cruives inspected.

Do you not think that the Duke's factors are more likely to favour the interest of their own tacksmen than that of the upper fishermen?—Certainly; but I also believe that the Duke or his factor would put down any irregularity, if they suspected any such thing to exist.

Do you not think that this previous notice enables persons, placed at the cruives, to remove any irregularity that may exist?—It certainly gives them an opportunity of doing so.

Do you not think that it would be a more satisfactory arrangement that the upper heritors, or persons authorized by them, should be entitled to inspect these cruives without any notice whatever?—It would be more satisfactory to the upper heritors, I have no doubt; but the Duke of Gordon's feelings might be different upon that subject.

But do you think that the Duke would have any reasonable ground of complaint against such opportunity of inspection being given to the upper heritors?—I don't say that he could have any reasonable ground of complaint.

Is it not, in point of fact, impossible for the upper heritors to know whether the Saturday's slap be heeded or not, if they be obliged to give that previous notice you state to the Duke of Gordon or his factor?—I believe it is impossible.

Is there any other change in giving the Saturday's slap in this cruive, than what you describe as to the inscales?—Yes, they take out the hack, which makes the whole space open, so that the fish pass through without any difficulty.

Is there more than one hack?—There is one hack to each cruive.

And do you know the width of the hack from side to side?—I should say, that it is five or six feet, but I cannot speak with certainty. We have all these instructions from the Duke of Gordon as to the size. The fact is, that the whole thing was regulated in a court of law, and we received our instructions from the Duke's factor, both with regard to the size of the hack and number of cruives that are to be employed, the width between the rungs, and in every other respect.

Are those instructions given to you in writing or verbally?—I think we received them in writing when we first took to the fishing, which is twenty-two years ago.

Can you furnish the Committee with a copy of the regulations which you consider yourself bound to observe as the Duke's tenant?—I have no doubt it is in our custody. *See* Appendix, No. 15.

Will you procure a copy of those regulations, and transmit it to the Committee?—I shall endeavour to do so.

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Do you rent any other fishings in the Spey, above the Duke of Gordon's?—Yes, we do; Mr. Wharton Duff's fishing.

Any other fishings above?—No other; we purchase fish of people who catch them, but we have no lease of any other.

Those are tacksmen of Earl Seafield?—We purchase them of the Rothes fishers.

Are you aware of the mode of fishing at Rothes?—I never saw them fishing at Rothes.

You have stated to the Committee, that the man who is stationed upon the cruive on Sundays was placed there for the protection of the fish?—Yes, to prevent people coming to steal them.

Could he not equally protect the fish, if he were stationed upon the land?—I think he could, during the day, but not at night.

The Committee wish to know, whether mill leads are most likely to be entered by salmon in their course up the river from the sea, or upon their return to the sea?—At one season of the year all the fish are going upwards, that is, during the greater part of the season, and of course they must enter the lower part of the mill stream; when they are coming down as kelts, they must come in at the upper part.

The Committee wish to know, whether they are more likely to go in at the time they are ascending the river, or more likely to enter this channel when they are going back to the sea?—A good deal will depend upon the state of the river, and upon the nature of the mill leads; at present, (or at least when I left home,) the river Don was so very low, that the whole of the water was abstracted from the natural course by means of the Granham Mills and the Printfield Mills; the one of these mills is a cotton manufactory, and the other is an extensive linen manufactory.

The Committee would wish to know whether kelts, in their way down to the sea, don't destroy many of the salmon fry?—It was my opinion that that was the case, and I wished to satisfy myself whether it was so or not, I therefore caused the fishermen to bring in four kelts from the Don, which I had opened, but I found nothing in their stomachs, and therefore I still hesitate in my opinion.

At the time you allude to, when the four kelts were examined, were the fry on their way down the river?—There were plenty going down.

Mr. John Mures, called in; and Examined.

Mr. John Mures.

WHERE do you reside?—At Warkworth, in the county of Northumberland.

Have you any knowledge of the salmon fishery in the river Coquet?—Yes.

What opportunity have you of possessing such knowledge?—From fishing for the Duke of Northumberland from being a boy, until these last twelve years that I rented his fishings.

Do you mean that you have been for the last twelve years the lessee of the Duke of Northumberland's salmon fishery in the river Coquet?—Yes.

Has the salmon fishery in that river decreased within your recollection?—We have very few salmon; we have principally salmon trout.

In your recollection were there many salmon in that river?—Not in my recollection.

Do you mean to state that there never was a considerable salmon fishery in the river Coquet?—I have been informed so; but it is not within my time.

But has the salmon fishery, such as you have known it, increased or decreased in the river Coquet?—It has decreased.

Is there a considerable sea-trout fishery in that river?—Yes.

Has the sea-trout fishery increased or decreased there during your recollection?—It has increased till 1817.

Since that period it has decreased, has it?—It has.

To what causes do you ascribe the decrease of the salmon fishery, or the sea-trout fishery since the year 1817?—From poaching, and from too short a close time.

What do you consider would be the best close time for the river Coquet?—From the 20th of October till the 1st of April.

Do you found that opinion upon the facts connected with the period of the breeding of the fish?—Yes.

Where do the salmon or sea trout in the river Coquet spawn, to the best of your knowledge?—Up the river.

Are there any obstructions in the river Coquet to the free passage of the salmon from the sea to the upper part of the river?—Yes.

What

Mr. John Mures. 19 May, 1825.

What are those obstructions?—There is a mill dam at Warkworth.

How long has that mill dam existed?—From time immemorial.

Has any alteration upon that mill dam taken place within your recollection?—No.

Was it at any time rebuilt entirely?—No.

Has it been raised within your recollection?—No.

Was there, at any time in your recollection, any opening in the mill dam, by which salmon could ascend and descend?—At one time, for a few weeks, there was a breach in the dam by which the fish could throw themselves over.

But was there at any time within your recollection any slap or gullet in the dam, by which the fish were at all times permitted to ascend?—No, never.

Do you consider that this mill dam, by which the fish cannot ascend, is injurious to the breed of salmon in that river?—No, I don't consider it injurious.

In what manner do salmon get up the river for the purpose of spawning, if that dam, over which you say they cannot pass, be interposed between them and the spawning grounds?—By a bye-race, where we lift the sluice and the gratings in front to admit them to go.

Is that bye-race open at all times of the year?—No; after the new year comes in we close it up.

Is it kept open at all times during the fence or close season?—No, it is opened upon the 20th of October, and kept open till the new year, when we consider most of the fish have gone up to spawn.

Is that bye-race used in any way for taking of the salmon at any other season of the year?—Yes.

Is it by that bye-race that the greatest quantity of your salmon are taken?—When the river is flooded it is.

Do you wish the Committee to understand, that during the fishing season no salmon in season are permitted to ascend the river, so that the upper proprietors might take salmon in good condition?—There are small fish; the gratings admit small fish to pass.

But is it the object of your fishery to prevent fish of a good size ascending the river?—Yes.

Do you think it likely that the persons upon whose property the salmon breed will protect them while breeding, if they be not permitted to partake of the salmon in season?—Certainly not.

If that dam were removed, should you expect the salmon and trout fishery of the river Coquet to increase?—Yes.

Can you venture to give an opinion whether the Duke of Northumberland's fishery would be more or less valuable, if all the obstructions to the free passage of the salmon were removed, and were due pains taken to protect the breed of salmon from the source to the mouth of the Coquet?—I have no doubt that the Duke would have more fish, but the fishery would not be worth so much money.

How do you account for that?—There would be a great deal more expense in the fishing, and there would be more opposition in other fisheries.

Do you mean that the price of salmon in your neighbourhood would fall?—Certainly it would.

What is your market for salmon?—Newcastle, principally.

But by extending your market, do you not think that the price of salmon might be maintained as it now is?—It might, certainly.

Do you, upon the whole, think that by extending your market, the price of salmon might be maintained, and that the quantity might be considerably increased?—I suppose it might be increased.

Do you think that if the present system of preventing the fish from ascending freely to the spawning ground is persevered in, that the fisheries in your river will progressively be diminished?—If there be not a stop put to the poaching, and the close time extended.

Do you think it would be possible to put a stop to the poaching otherwise than by giving an interest to all proprietors to restrain it?—Yes, by levying heavy penalties on the persons convicted.

But do you think this system will be more easy and effectual in future than hitherto?—I should; I believe it would.

Do you think that if all obstructions were to be removed, and if you were to enter upon a lease of these fisheries for a considerable period, that you might not

Mr. John Mures. 19 May, 1825.

venture to give to the Duke as great a rent as you now do?—I don't exactly see that I can answer that question.

Is there any other obstruction or dam upon the Coquet?—Yes.

At what point, and what is its name?—It is called Acklington Factory.

Is it similar to the dam you have already described?—Yes.

Has it been altered within your recollection?—No.

Is there any gullet or slap for the ascent of the fish?—There is a bye-race.

Is there any fishery carried on between Warkworth and Acklington?—No.

For what reason is no fishery conducted between Warkworth and Acklington?—I suppose it is, because it is not worth fishing.

If it be not worth fishing below Acklington, must it not be at least as little worth fishing above Acklington?—Much the same.

Will you state whether that is an accurate plan of the dams, mills and races at Warkworth?—[*Handing a Plan to the Witness.*]—I do not think it is very accurate.

Veneris, 20° die Maii, 1825.

THOMAS FRANCIS KENNEDY, ESQUIRE,

IN THE CHAIR.

Mr. John Mures, again called in; and Examined.

Mr. John Mures. 20 May, 1825.

CAN you point out the points in which it [*the Plan before produced*] is inaccurate?—The race on the north side of the river delivers the water sooner into the river than is marked upon this plan; in other respects, it is accurate.

Is that an accurate plan of the dams, mills and mill streams at Acklington Park? [*Handing a Plan.*]—Yes, I think it is.

I think you stated, in your evidence yesterday, that although the salmon fishery was small in the river Coquet, yet that it had decidedly decreased in your recollection?—Yes.

Did you not also state, that if that river were clear of obstructions, by which the salmon might ascend to the spawning grounds, the quantity of salmon, although not the value, would no doubt be increased?—Yes, I did.

Mr. John Turner, called in; and Examined.

Mr. John Turner.

WHERE do you reside?—At Amble, near Warkworth, in the county of Northumberland.

Have you any knowledge of the salmon fishery upon the river Coquet?—I have lived at Amble about sixty years, and am just at the mouth of the river; I am nearly sixty-four, and have known that fishing for about fifty years; I think I can recollect what happened when I was about fourteen years old.

Has the salmon fishery in that river increased or decreased in the course of that time?—At that time there were very great quantities of real salmon caught there; and I think, about fifty years ago, there was a dam built about eight miles up the Coquet, at a place called Felton Park, near Acklington, and from that time the salmon fell quite off.

Did that dam prevent the salmon going up to the higher part of the river?—It did.

Was there no dam there previous to the time you mention?—None before that.

Was there any other dam erected upon that river, in your recollection?—Not that I know of.

Is there not a dam at Warkworth?—Yes, but that was erected long before.

Did the dam at Warkworth not prevent the salmon ascending before the dam at Acklington was erected?—No, for this reason; there is a race goes off at one end of the dam, which is to stop the fish with; they have hacks put down, that the fish may get up at Warkworth, and flood-gates to let the water on; the fish come up to those gates, where a run of water that comes through those hacks carries them, and when they want to take the salmon out, they put the flood gates down, and the fish remain there dry.

During

Mr. John Turner.

20 May 1825.

During the fishing season are those gates upon the races at the side of the dam ever opened to admit the salmon to go above the dam?—The hacks are never taken up.

Consequently, fish, during the season of fishing, are not allowed to go up above Warkworth dam?—No.

Supposing the hacks were taken up for twenty-four hours every week during the fishing season, would not the upper fisheries obtain clean fish, which they don't now?—In flooded water they might obtain fish; in dry weather, there are few go up so high, but they would go up a certain way.

If those clean fish were allowed to go up the river, would it not induce the gentlemen above to preserve the spawning fish?—Yes, every one would strive to protect his own property and keep poachers off.

In order to preserve the breed of the salmon?—Yes.

You stated, that within your memory, between forty and fifty years ago, there was a valuable fishing of full grown salmon in the Coquet?—Yes.

Has that fishery decreased?—It has.

Is the salmon fishery now inconsiderable?—There has been a considerable quantity of trouts caught there these many years, but not many salmon.

To what cause do you ascribe the small number of salmon that are now found in that river?—The reason that I ascribe is, that the salmon left the river and the trout became very numerous; and I believe that the trouts destroy the salmon spawn, because, during the time that I had the fishery for the first three years, we set all the salmon and grilses over the dam head, in order that they might go up the river.

To what cause do you think the salmon leaving the river is to be ascribed?—Because of the Acklington dam head.

Now, supposing that the Acklington dam and the Warkworth dam were so lowered, and had a slap in them, so that the salmon could get up, would there not be sufficient water, and would not the mills be carried on as well as now?—I should suppose there would be plenty of water for that purpose.

Do you think, if by such means the salmon could ascend freely over those dams, that there would be an increase in the value of the fishery at Warkworth?—I do think there would be an increase, and a great one.

Do you mean to say that the proprietor of the fishery at Warkworth would gain by promoting this free ascent?—That is my opinion.

At what time do the fry come down the river Coquet?—The first flood in May.

At what time do you think, with a view to produce as many good salmon as possible, and not to take bad ones, that the fishing season in the Coquet should commence and cease?—From the month of March till the 29th of September are the best months for fishing.

Martis, 24° die Maii, 1825.

THOMAS FRANCIS KENNEDY, ESQUIRE,

IN THE CHAIR.

Mr. *John Carpenter Steavenson,* called in; and Examined.

Mr. J. C. Steavenson.

24 May 1825.

WHERE do you reside?—At Fortrose, in Rosshire.

Are you acquainted with the salmon fisheries of Scotland?—With most of them, less or more.

How long have you been acquainted with those salmon fisheries?—About sixteen or seventeen years.

Are you chiefly engaged, as your profession, in managing salmon fisheries?—It is almost my only profession.

During the last seventeen years it has been so?—It has.

Then you have had ample opportunities of observing the habits of the salmon?—Many, constant.

Of what fisheries have you had experience?—I have an acquaintance with almost all the rivers north of the Spey; the Spey, Findhorn, Nairn, Ness, Beauly, Conon,

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Alness, Oykell, Shin, Helmesdale, Brora, Beredaile, Thurso, Bighurst, Ewe, Lochy, and all their tributary streams.

Are you at present interested in many of those fisheries?—I am at present interested in the Ness, Findhorn, Conon, Alness, Beredaile, Thurso, Bighurst, Ewe and Lochy fisheries, and in sundry sea-fishings.

Have you any fisheries belonging to you in property?—I have property in the Ness.

Have you any fisheries on the open sea coast, or in the friths, belonging to you in property?—None.

Have you any long leases of river fisheries?—The longest lease I have got of any moment is, I think, seven years.

Have you any long leases of sea or frith fisheries?—The longest lease of frith fisheries I have has about eleven years yet to run.

On the whole, do you consider you have a greater interest in river fisheries, or in sea or estuary fisheries?—In river fisheries, considerably.

Do you consider the sea to be the abode of the salmon, where it lives and feeds?—That they live and feed in the sea I have no doubt; but that they also live and feed in the river cannot be disputed; they however appear not to live so well in the rivers.

Do you consider that residence in the sea is essential for their being in good condition, and being fit for being taken?—I do.

Do you consider it to be the habit of salmon to seek the rivers during the summer months, or does any considerable proportion remain in the sea?—I consider that a proportion of them do seek the rivers in the summer months, but that a considerable proportion of them remain in the sea. I am rather of opinion that the greatest proportion remain constantly in the sea.

Do you mean that they remain in the sea as matter of habit, or from any cause obstructing their progress to the river: for instance, want of water?—As matter of habit, in most instances; but in some cases, because the river which they happen to visit is not in proper condition to receive them at the time they visit it.

What is your opinion as to whether all salmon which are on the sea coast, or not, go into the estuaries, being then in search of rivers?—I am of opinion that they very frequently make their appearance on the coasts of Scotland without having it directly in view to enter any particular river; if they meet with a river in a proper state to induce them to enter, the probability is that many of them will enter the river; but finding the water in a disagreeable state they will either pass on along the coast to another river, or they will leave the coast entirely, particularly after a certain season of the year, and remain at sea.

Do you conceive that any considerable portion of the salmon that enter estuaries would, if not taken, go back into the sea?—A very considerable proportion of them would return into the sea if not taken; we have daily experience of their returning in great quantities.

Have the goodness to state the grounds on which you entertain this opinion?—From the circumstance of its being within my knowledge that very great quantities of fish have visited the mouths of many rivers I am acquainted with, and after having remained there for a short period of time, days, in some instances, in others weeks, and I would almost venture to say months, they have left the mouth of that river and gone to sea again, without having been ever seen more near to it.

In your experience, have you frequently seen salmon on their progress out of the estuaries towards the sea?—They have been frequently caught by my servants on their way from the estuaries towards the sea, and I have myself repeatedly seen them leaping towards the sea on their way down the estuary.

There are such circumstances as leave no doubt in your mind that that was the course they were pursuing?—Were I not satisfied that that was the course, I would not give the evidence I am now doing. The rivers I am acquainted with, particularly rivers having considerable estuaries, alluding particularly to the Tweed and the Tay, the tide flows a considerable distance in both those rivers: immense quantities of salmon come up during the summer season. It is only during a particular period of the season they will do so, when the weather is warm, and the river discharging small quantities of water, and return to the sea with the tide; but in many of the north-country rivers, those discharging most water, so soon as a thunder-storm, or very heavy fall of rain takes place, after this season of the year the fish seem to go back *en masse*, and the body is never more seen near those rivers for that season; if, on

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the contrary, we have a continuance of dry weather, or moderate rains, we have a continuance of fish during the whole summer; this complete desertion of the fish usually takes place in July, when we have heavy rains; about the mouth of the Tweed, I am perfectly aware immense quantities of fish very frequently remain for weeks, and I might venture to say for months at a time; and if the river is very small they do not enter. They come up as far as the tide will carry them, and having done so, return with the ebb tide again to sea; this they probably do day after day for many days or weeks; but I believe (though I am not so intimately acquainted with the Tweed as to be able to speak so positively as I would wish to do) these fish frequently take the river in great quantities in case of a flood of clean water coming down. I, on one particular occasion some years ago, saw a very great quantity of fish in the bay of the river Tweed, about the end of the month of October, after the fishing was closed; the river was at the time little, and those fish, to the best of my knowledge, never entered; at all events there did not appear to be so great a quantity of foul fish (spawners) found in the river after the winter season as there was an appearance of in the bay at the time I allude to; they disappeared shortly afterwards.

Are there any considerable number of grampuses and seals in the northern coasts and estuaries?—A very considerable number.

Will you state whether they exist in considerable numbers within your knowledge?—I have seen several scores at a time in the frith between Fort George and Inverness; they came from the lower part of the frith with the flood tide, and returned with the ebb: I have also seen immense quantities of grampuses in Berwick Bay, at the mouth of the Tweed, and I know they are seen about all the salmon resorts in Scotland.

Is it your opinion that any considerable number of salmon are destroyed by grampuses and seals?—I understand they destroy immense quantities of salmon.

Have you any reason to think that salmon are ever driven out of the course they would naturally take by those animals?—Very great reason: after we have seen a flock or herd of them (they hunt in packs), we rarely have any fish for a day or two, at least they appear much scarcer after the appearance of grampuses.

From the facts you have stated, with reference to the existence of salmon in the sea, do you mean to say that it is your opinion that an extensive fishery might be carried on in many places in the sea, and in estuaries, without any considerable diminution of the produce of the river fisheries?—I am of opinion that the fishery might be increased in the mean time, by prosecuting the fishery in the sea to its fullest extent; but I am not satisfied that it would not less or more injure the river fisheries; I think it probable that some injury would be done to the river fisheries in the immediate vicinity of any sea-fishing that might be carried on.

Is it a fact, that during the last season, or the season immediately preceding, there was a remarkable instance of the success of a fishery on the sea, near Thurso river, while there were no fish to be got in the river?—The fishing in the bay near Thurso river was not particularly successful during the last season; it was moderately so; but it is a fact that not one fish was caught in the river from the 9th day of April up to the end of the season.

Can you account for that fact?—It was entirely owing to the state in which the river was.

Do you mean the want of water, or any other cause?—The want of water.

That was a fishery in your own possession?—It was.

Will you have the goodness to state the produce of your river fishery during the summer months, and the produce of the sea fishery during the same period?—I can give an account of the quantity of fish during one month or season, during the time I have had the fishery; I have my books in town, but am not prepared with a statement at present.

Can you furnish the Committee with statements showing the produce of fisheries which have been in your occupation during any considerable period?—I cannot furnish the Committee with any direct statement of the produce of any particular river for a greater period of time than three or four years; but I can furnish a statement, which I am satisfied is nearly correct, for nearly twenty years of the river Conon, and the frith adjoining to it. These fishings are very much divided; they have not been all in my possession, nor the possession of my father, who preceded me; I have, however, access to know the produce of most of the fishings in the frith, and by calculation I can show it pretty nearly, so as to give an idea of the increase and decrease during that period.

See Appendix, No. 10. p. 165.

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Will you prepare and deliver in such statements as you are enabled to do with accuracy?—I will do so, coming as near as I possibly can to accuracy.

Do you consider that the fish which you caught in the sea, near the river Thurso, would have been lost if they had not been taken where you did take them?—I am of opinion many of them would have left that bay; they might have migrated farther south, and found some other river; and it is possible a few of those which entered the river after the close of the season remained till a flood of water came to enable them to enter the river Thurso. I am rather of opinion that most of them would not have had patience to wait for that opportunity: being disappointed of the Thurso, would have migrated south. A remarkable instance of this disposition is observable on the Sutherland coast: the Helmsdale has been almost totally unproductive for six or seven years past, whilst the Borrydale (next river to it) has almost doubled its produce during the same period; the Helmsdale has been destroyed by the increase of the herring fishing in that quarter. My opinion is that they migrate south.

Do you think you caught a great proportion of the salmon in that neighbourhood, or that a considerable proportion left you after all?—I am satisfied a very great proportion left me; if the river had been in a proper state to receive them, my fishing would have been double what it was.

By what modes of fishing did you take them?—By a mode of fishing called stelling.

Will you describe that mode of fishing?—The mode of stelling practised at Thurso is by means of a very long net, which is stretched out about half its length, in a direct line, into the sea; two men are placed in a boat, one at each end, one with his face to the south, and another with his face to the north; they watch until they see a fish leap or swim; having done so, the net is shot round in the direction in which the fish is supposed to be swimming; the rope is then conveyed to the shore, and the net is dragged in.

What is the difference between this mode of fishery, and what is called stelling in the river Tweed?—The difference is, that in the river Tweed most of the nets are set facing either a flood or an ebb tide; it is necessary in that case to fix them, to do which an anchor is used; the stellsman then goes to the back part of the net, where he fixes his boat, and usually stands upright in the boat until he sees a fish swim, or make some other motion in the net; but stelling at Thurso is so far different that it is carried on in almost still water: we therefore have a double advantage; the net may be used to take fish coming either way.

Do you consider that the mode of stelling practised at Thurso is the most advantageous means of fishing in that place?—I always make use of the most advantageous means I can, and of course I consider it the most advantageous. I have attempted to use a stake net at Thurso, but found stelling more advantageous; the utility of stake nets depends much on the particular situation of the place.

Do you consider that the stake net is useful chiefly where the tide recedes to a considerable distance?—The most productive stake nets I am acquainted with are situated where the tide does not recede to a very great distance.

Do you know a point of land called the Burgh Head, where a stake net was erected some years ago?—Perfectly.

Have the goodness to describe the situation of that net?—Burgh Head is a head of land projecting into the sea in the Murray firth, seven miles from the mouth of the river Findhorn, to the east, and about an equal distance from the mouth of the river Lossie, to the west; the stake net now alluded to is situated upon the western side of the point of Burgh Head; it faces the out-going tide running to the east, and takes fish returning to the sea.

Has the net you have now described been successful?—I have understood it has been more successful than was at first calculated upon, but I have not heard of its being very successful.

Would any mode of fishery be more advantageous at that station?—I believe, none; I am not acquainted with any mode of fishing which would be so advantageous as that by means of a stake net in this situation.

Can you state any reason for that opinion?—The particular nature of the ground upon which it is placed, the distance to which the tide ebbs out, and the small quantity of fish that is to be found together; they are collected during a long period of time, the whole tide, flood and ebb.

Do you mean to say, that if a stake net were not erected there, no fish would be taken there?—I am not satisfied that no fish would be taken; in all probability not above a fourth of those now taken could be taken by any other mode.

What

What is the nearest river to Burgh Head?—I am not very sure whether the Findhorn or the Lossie is the nearest; I dare say they are about an equal distance.

Mr. I. C. Stevenson, 24 May, 1828.

You stated that the net there erected was an ebb net?—I did.

Have the goodness to state the peculiarity of an ebb net?—Ebb nets are universally placed in situations where they face the ebb tide, or an eddy caused by the formation of the land, the flood tide running past a point usually forms an eddy behind that point, and in those situations stake nets, and nets of other descriptions, are frequently placed.

Do you mean to state that a stake net, constructed upon the principle of an ebb net, catches the fish on their way out of the firth, and consequently, on their way from the river?—That they do so generally; in some cases they may be so situated as to take the fish on their way to the river, and still be facing the ebb tide; for instance, where a river runs in at right angles with the firth; the river Ness is an instance; a net might be placed in the mouth of the river Ness, facing the ebb tide, and yet take fish going into the river; but this is an occurrence which can take place only when the river is peculiarly situated.

Do you conceive that the Burgh Head fishery tends, in any considerable degree, to diminish the produce of the fisheries in the river Findhorn, or in any other of the rivers in the Cromarty firth?—It is a very difficult question to answer, but I am quite of opinion that there is little or no injury done to Findhorn, particularly that it is just as likely that the net at Burgh Head should injure the river Beauly at the top of the firth, or the river Spey below the same firth; nay, I would say, it was nearly as likely to do injury to the river Tweed as the river Findhorn, such is my conviction of the habits of fish.

Have you any interest or connection with the Burgh Head fishery?—None whatever.

You stated that you were interested in rivers and estuaries to the north of it?—I am interested in the river Findhorn, and in the sea-fishing at the mouth of the river Findhorn, and in almost all the fisheries north of it.

Do you wish the Committee to understand that you do not think you as interested in the Findhorn, and otherwise, as you have stated, have any real interest in the discontinuance of the Burgh Head net?—So far as it takes fish which would enter the river Findhorn, or any of the rivers to the west of it in the Murray firth; it would certainly be my interest to have the net at Findhorn done away, but my conviction of the slight degree of injury it does is so great that I feel very little anxiety about its being discontinued.

To whom does the Burgh Head net belong?—The property upon which it stands belongs to Mr. William Young, of Mary Hill, Elgin; it is the leasehold property of Messrs. Johnson and Sigure, (I think that is the firm) of Dundee.

Are you acquainted with the stake net at Fortrose?—I have several stake nets at Fortrose.

Upon whose property?—I have three upon the property of Mackenzie, of Flowerburn, and Mr. Millar, of Kincardy, and I have one at Fort George, upon the property of His Majesty.

How long have those stake nets near Fortrose existed?—I cannot state the exact year in which they were put up; but I think they have been in existence since about the year 1813; the stake net at Fort George is a much older one; I dare say that has been in existence ever since the year 1806 or 1807.

Are the stake nets you have now stated you are connected with placed at stations which were formerly fished by coble or draught nets?—They are all of them placed in situations where coble and draught nets were used in former years.

Then they are placed at stations where the fishery might be conducted by other means than stake nets?—They are, except the Fort George net, which could not be conducted to such an extent by stell nets as it is by means of stake nets; the stell nets at Fortrose might, I am of opinion, be equally as successful, or nearly as successful, as the stake nets, but that would require to be done at an expense the fishing could not bear.

Do you conceive that at Fortrose and Fort George there is less expense in the stake-net mode of fishery than any other that can be adopted?—At Fort George no other mode of fishery could be made so productive; it is an ebb net; it takes the fish on their return; is of considerable length, and stands on a flat sand, where no other description of net could be used so as to be productive; at Fortrose it is not exactly so.

Mr. J. C. Stevenson. 24 May 1825.

What is the length of the net you have mentioned at Fort George?—I am not acquainted with the exact length, but to the best of my knowledge and belief, it is from 160 to 180 yards.

Does it extend to low-water mark?—During neap tides it extends beyond low-water mark; during the spring tides it might be made nearly twice as long as it is, but in that case it would not pay the expense, the extension of it would not make it much more productive than it is at present; it has been tried much longer than it is now.

Do you conceive that your stake net at Fortrose has tended to diminish the produce of the fisheries in the river Ness?—I think I can very easily prove that it has done little or no injury to the river Ness.

State the grounds on which you make that assertion?—I have an account during the last four or five years of the whole produce of both fisheries, as they are taken down every day. During the season the Ness is fishing, the stake nets at Fortrose produce almost no fish, the quantity is quite trifling, I think on the average about 250 salmon; some seasons there has been more, and some a good deal less, while the Ness has been fishing; the Ness is a river of a peculiar character, and only produces fish at a certain season of the year; the season commences on the 10th of December legally, and the river immediately commences to give clean fish; they continue to increase in quantity until about the 1st of March, or later, according to the state of the water, when the season appears to be at its zenith; they then decline in quantity gradually until about the middle of May, and from that time until the end of July scarcely a salmon is taken in the river. The stake nets at Fortrose are used from the beginning of December, but the produce is quite trifling, as I have already stated, during the season the Ness is at work, probably not more than fifty salmon per month on an average.

Will you have the goodness to deliver in to the Committee the statement which you say you can produce of the river Ness, and the stake nets at Fortrose?—I will.

You state that you are proprietor of certain fisheries in the river Ness, and also the lessee of fisheries in the river?—I hold in property a fishing called the Friars Shot, in the river Ness, extending from a wooden bridge across it about 300 yards up the river; and I hold on lease what is called the cruives, and four-cobles fishing of the Ness, belonging in property to the town of Inverness, Messrs. Forbes, Hogarth and Company, of Aberdeen, Colonel Baillie, of Leys, and Major Duff, of Muretown, a Mr. Fraser, and Forbes of Culloden. I also hold the stell fishings at the mouth of the river Ness, the property of Major Duff, of Muretown, one of the proprietors of the four-cobles fishing: my own property is the most valuable property in the river, and consequently the Committee will see that I would be indifferent to my own interest were I to prosecute the fishery at Fortrose to the injury of the river Ness.

Is it a fact that the produce of the fisheries in the river Ness has diminished of late years?—They have diminished to an enormous extent.

You have said that you do not consider that decrease to be attributable to the stake nets at Fortrose in any considerable degree?—I have.

Have the goodness to state what you conceive to be the causes of the decrease in the river Ness?—I believe it to be very much owing to the fish coming upon the coasts of Scotland at a much later period than they used to do in former years, from the nature of the winters we have lately had; they are so much influenced by weather, that I even believe it to extend to their coming upon the coast earlier or later in the year. There is also evidently a very considerable injury done to the Ness by the destruction of the spawn in the Caledonian Canal; but so far from the stake nets at Fortrose being the chief injury to the river Ness, the whole quantity of fish taken at Fortrose is, I have reason to believe, not one third of the produce of the river Ness in former years. Admitting the doctrine we hear of, of every fish having its own river, we have the fish of the Beauly and the Ness both to take from; now the produce of the fishing at Fortrose has not been more than one third of the produce of the river Beauly; during my experience I have distinctly stated that it is not my doctrine that each fish has its own river.

Is the stake net at Fortrose in any considerable degree more successful than the former coble-net fishery at the same station?—My father and I have held the fishing at Fortrose since the year 1810; before we had it it was very much neglected. I have already stated that I believe nearly the same quantity of fish might be taken by means of cobles and nets, but that the expense of fishing it by that mode would exceed the value of the produce. I believe we have increased the

produce

produce of the fishing at Fortrose, but I consider it more to be attributed to our assiduity than to the actual improvement by the use of the stake net.

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Do you consider the stake-net mode of fishery to be destructive of the fry of salmon?—If they are not properly attended to, and kept clean, they may be destructive of the fry, particularly the ebb nets, but I never heard of any quantity of fry being destroyed in any of them; it is for the interest of the tenant to keep them in such a state that they will not destroy the fry; the meshes are usually four inches wide, that is to say, two inches on each side of the square; the fry would go through a mesh half an inch on each side.

Is the stake-net mode of fishery destructive of the foul fish?—Quite the contrary; ebb nets will take a few foul fish sometimes, but though they do, I cannot see any mischief that is to be done by that; it is only a head of fish destroyed, the same as taking the finest clean fish in the sea.

What do you consider to be the effect of stake nets when used in friths, in reference to navigation; are they beneficial, or have they an opposite effect?—As they are set in shallow water, not exceeding fourteen or fifteen feet, I should rather imagine they have a beneficial effect than otherwise; they may now and then obstruct very small vessels, but a vessel drawing twelve or thirteen feet water, which is a very moderate draught, would not think of coming into a situation where a stake net is placed, for there would only be a foot of water to spare, and as they are usually placed on sand banks and shallow places, the pilot would avoid them, and consequently they rather act as beacons than in a prejudicial way; in some cases they may be a little in the way of small vessels, but where they are they generally go through them, and knock them down where they are found to be obstacles to navigation.

You consider that upon the whole they generally point out the shallows, leaving the deep water open?—Yes, I should rather apprehend they are useful than otherwise.

Are you particularly acquainted with the fisheries in the Cromarty Frith?—particularly.

Have you fisheries in some of the rivers?—I have most of the fisheries on the frith, and on the principal river that runs into it.

Had you any cause of knowledge of any of those fisheries before the stake nets were used in the fisheries, and since they were first used?—I have accounts of fish taken in the river before they were used, and since they have been in use.

Can you furnish the Committee with an account for those periods respectively?—I will do so. I cannot exactly inform the Committee of the year in which the stake nets were first erected; I believe about the year 1811, or 1812.

Were you interested in the river fishery when the stake nets were in use below?—My father was.

From what you have observed and known, do you consider that the produce of river fisheries, during the whole year, has been in any considerable degree diminished by the fisheries in the frith below it?—The fishery in the river Conon has fallen off, particularly in the quantities of salmon, gradually, since the year 1807; there have been one or two seasons which have exceeded the season immediately preceding, but none of them have ever come up to the year 1807, either in the frith or the river, or in both together; the grilse fishing has rather increased since 1807, both in the frith and the river.

Can you state what per-centage of the whole produce of the river fisheries of Conon may be considered as taken away by the fishery in the frith?—I am not very sure; but by a careful examination of some accounts I might give an idea of the exact quantity of fish taken in the stake nets, and the exact quantity taken in the river; whether those are all fish that would have gone into the river, I cannot say. I am of opinion that the salmon fishing is materially injured by the stake nets in the frith, but I am of opinion that the grilse fishing is not materially injured by the stake nets in the frith; that they are taken at a season when a very small proportion of them would come to the river. I am rather of opinion that by an increased quantity of nets during that season of the year a still greater quantity might be taken; I allude to the season of the year when the fish seem to refuse the rivers; and I should wish to state generally, that the fish taken in rivers are of finer or inferior quality according to the state in which the river is to receive them, or rather to induce them to come in; when the river is in a state to induce fish, we get them of much finer quality than at a period when they do not enter so readily;

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they are apparently better fed, in better health, and in every respect superior fish: it is also worthy of remark, as a peculiarity in the history of the salmon, that the largest fish are usually got in fishings at sea, and that the nearer fish are got to the salt water the finer is their quality; so much so, that any one versed in the state of salmon would at once be able to pick out, from five hundred head of fish, those that had been more than two or three days in the river; indeed I am not sure that I could not distinguish the fish which had been taken one mile from the sea. Every fisherman can tell, by observing the state of weather, whether he is likely to be successful on any particular day, but a very different state of weather suits different rivers. It is generally supposed that salmon is in season at different periods of the year, in different rivers; this is so far a correct supposition; it does not, however, depend upon the state in which the fish is at that period, but on the state the river is in. Salmon are extremely nice, and in my opinion only go into fresh water when it is exactly to their taste; for example, the river Ness, Ewe, Shin and Thurso, supply the earliest fish, the Tweed and Tay also supply early fish, but the latter not at so early a period as the former: the cause is plain; the Ness, Ewe, Shin and Thurso, are discharged from the largest lakes in Scotland, and consequently, during the winter and early spring months, send down water purified of all its disagreeable qualities, and in a state liked by the fish; the Tweed and Tay are running principally over clay soils, and whilst they send down the spring floods, are not impregnated with the disagreeable particles which deter the fish from entering those rivers I am about to remark on, namely, those running from a mossy country, and discharging their waters into the sea without being purified in such reservoirs as Loch Ness and Loch Maree; those are lochs out of which the Ness and Ewe run; of the other description are the Findhorn, Conon, Beauly, Spey, and many others. During the spring months, whilst those rivers are swelled by the melting snows, they are turbid and disagreeable to the salmon, until about the month of April, when they begin to discharge light spring rains, sweet, and comparatively free of those impurities; and consequently they only commence to yield fish when the loch rivers above mentioned are beginning to fail; indeed when the seasons of some of them are terminated. These opinions I found on facts and observations which have come within my own knowledge. In order to confirm the facts I have laid before the Committee, it would be proper to require an account of the quantities of fish taken in almost all the various fishings in Scotland, and the exact periods at which they have been taken; from this the Committee will discover that all the rivers discharged from lakes produce fish at an early period of the year, whilst those discharged from a mossy country do not produce fish until they commence to send down the sweet spring rains.

Are you acquainted with the yairs which exist in various places at the Cromarty Frith, and other places on the north-east coast of Scotland?—I am acquainted with two or three yairs on the Cromarty Frith; I also know two or three in the Murray Frith, and one in the mouth of the river Findhorn.

Do you consider such engines to be a proper mode of fishing?—Quite the contrary; I consider them a most destructive mode of fishing.

Are they destructive of the fry of salmon?—They are not only destructive of the fry of salmon, but destructive of the fry of every other description of fish; so much so, that it has come within my knowledge, on certain occasions, that carts have been loaded with the fry of fish, (I will not say of salmon,) but salmon among others, and sent to market.

Are the cruives on the northern rivers in general properly regulated?—Where the river belongs in property to two or three proprietors they are generally well regulated, particularly if the property is in the hands of various tenants, but in cases where the property is entirely vested in one proprietor a close cruive is generally used.

Can you give examples of both cases?—Several.

Have the goodness to state them?—The river Thurso is the property of Sir John Sinclair, it is my leasehold property; the whole river belongs to Sir John, and I keep a close cruive.

What are the effects of a close cruive on a river fishery?—It is the most certain mode of fishing we are acquainted with in the river, insomuch, that unless the river is very high we an take almost every fish that comes; in some cases there are other rivers where cruives are injurious to the interests of the tenants, as they induce them to be

be negligent during the prime season of the year, under an impression that they will take all the fish that enter the river, whereas it is perfectly well known to all fishermen that many hundreds of fish enter those rivers, come as far as the cruive, and return to sea again without being taken; there is an instance in the river Beauly of a close cruive, it is the least expensive mode of fishing.

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The immediate or very speedy effect of such a mode of fishing would be the total extirpation of the fish from that river, would it not?—I am not satisfied of that; it is the most certain mode of fishing, and probably of taking the greatest part of the fish that get up any river, but it depends upon the nature of the river; we use it only during the fishing season.

Do you know any instances of rivers where the cruives are otherwise regulated, where there is a multiplicity of proprietors and tenants?—Yes, there is a regulated cruive upon the river Conon.

Have you any knowledge of cruives upon the river Spey?—I know there are cruives upon that river, but I am not intimately acquainted with them.

Do you know any upon the river Ness?—I know there was one on the river Ness; it has lately gone to ruin.

Do you know how that was occasioned?—I believe an action was brought by the upper proprietors of the river Ness, by the proprietors of Loch Ness and Loch Oich, Glengary, and sundry others, against the proprietor of the cruive fishings in the river Ness, the result of which action was, that an opening was made at each end of the cruive, up which the fish pass, and the cruive is rendered useless.

In performance of the promise you have made to the Committee, of producing returns, are you prepared to furnish returns of the comparative produce of the stake-net fishings in the Murray Firth?—I have no accounts which will put it into my power to give a distinct account of the fish killed at Fortrose by means of stake nets. I have accounts by which I may make the Committee acquainted with the whole quantity of fish which has been killed at Fortrose during fifteen years by stake nets and stell nets.

You have stated that you have other stake nets besides that at Fortrose?—I have three at Fortrose, and one at Fort George.

Are you prepared to furnish similar returns with regard to all the stake nets in that bay?—I have already stated, that I cannot distinguish the quantities of the fish taken by the stake nets and stell; I can produce accounts of the whole quantity of fish taken at the two fisheries I hold at Fortrose; and I can render a distinct account of the quantity of fish taken at Fort George for fifteen or sixteen years.

Have you a stake net at Culloden also?—I have not.

Do you know who is the tenant of that fishing?—To the best of my knowledge it is held by Robert M'Kinnon, or M'Kinnon and Company.

Have you the means of conveying information respecting the produce of that fishing?—I have a general idea that it is not a productive fishing, the whole produce of it is within five, six, or seven hundred fish per annum.

How early in Spring do you begin to fish with the stake nets?—We commence at Fortrose about the beginning of December.

Are they productive?—Very unproductive; they are not productive at any season. I have already stated, that the quantity does not exceed two hundred and fifty during the fishery in the river Ness, which is up to the month of April; there may have been seasons in which it produces a little more, but in general less.

How late in Spring have you ever seen any of the kelts in the stake nets?—As late as the month of March. In April I think I may have seen them.

They are very scarce then?—They become scarce then. I have seen a perfectly clean fish, one that must have spawned somewhere or other, and have become perfect again in the month of August, but that was a sort of phenomenon; in October we frequently find clean fish, fish that have spawned and are renewed again.

They have been in the sea and come back again?—They must have spawned at sea; there is not a doubt of their spawning at sea.

Mercurii, 25° die Maii, 1825.

THOMAS FRANCIS KENNEDY, ESQUIRE,

IN THE CHAIR.

Major *Dugald Gilchrist*, called in; and Examined.

Major Dugald Gilchrist.

25 May, 1825.

WHERE do you reside?—At Ospisdale, in the county of Sutherland.

Have you had any favourable opportunities of observing the fisheries on the Tain and Cromarty Friths?—I have, from my residence, and passing frequently to the Cromarty Frith; my chief observations have been in the Dornach Friths.

Are you personally acquainted with the fisheries, or have you any right of fishing belonging to yourself in property?—I am acquainted in some degree with a river at the head of Dornach Frith, belonging to Lady Ashburton; I may say, I have a small fishing at Spinningdale, in property.

Be so good as state, as nearly as you can, the annual value of your own fishery?—It is not fished at present; I have let it once at 5*l.* and some fish for my family.

Are you in any way acquainted with the fisheries in the rivers which fall into the Tain Frith?—With the Casley, as I mentioned before; the fishings in the river Casley, at the head of the frith, being the property of Lady Ashburton.

Are you acquainted with any other rivers, or do you manage the fisheries in any other rivers?—No, I am not so particularly acquainted with any other, nor do I manage any other.

Is it the fact, that stake nets were erected and in use some years ago in Tain Frith?—It is; a considerable number.

Be so good as state to the Committee the time those stake nets were erected, and the situation in which they were so placed?—To the best of my recollection the first of them might have been erected about 1804 or 1805; I shall not be positive as to the year, and I think they were in the frith until about 1815 or 1816. The numbers would be on the south side, first, the town of Tain, Tarlogie, then Sir Gilbert Stirling's; then Ardmore, Sir Charles Ross's; Fearn, Mr. M'Kenzie's, of Ardross, that is all on that side; on the other side there was one at Creech, Hawston's, Spinningdale, Newton Point, and Ardachie.

Were those nets erected by the respective proprietors of the fisheries, or by other persons?—They were chiefly by other persons; Ardross had his own. I think here was no other proprietor had his own net. They were let to tenants with that exception.

Were these stake nets which you have enumerated in general successful?—A great many of them were; many of them were very successful; some of them of course would not be so much so, and were abandoned.

Were any of them what are termed ebb nets?—Yes, almost all of them had ebb courts attached to them, and which it is believed caught one third of the fish.

Are any of these stake nets still in use?—There are none at the present moment that I know in the country, excepting one in the Little Ferry, belonging to the Marchioness of Stafford, and where no fish had ever been caught previously.

From what cause did these nets cease to be in operation?—Mr. M'Kenzie, of Ardross, after a decision of the House of Lords, obtained an interdict before the Court of Session. As soon as he did so the fishers ceased fishing.

Were they removed in virtue of that interdict, or independent of it?—I think one of these nets, or two of them, were cut to pieces by this Mr. M'Kenzie, of Ardross, who possesses the chief part of the fishings, or is tenant of the heritors above. He cut one of them to pieces, and there was an action at law about it. The fisher who had the chief number of these nets was Mr. Grubb, and I think he was partly ruined in consequence of those measures that followed.

At what period was the litigation to which you advert?—I think about 1815 or 1816.

Do you know whether there were any other parties except Mr. M'Kenzie who were complained of for having destroyed the net?—I heard of no others.

Have you any occasion to know, or have you any opinion as to what was Mr. M'Kenzie's object in destroying the net?—He had recently purchased the river Shin,

Major Dugald Gilchrist.
25 May, 1825.

Shin, a considerable river up the Firth, and I imagine that to draw all the fish to his own station must have been his chief object, for he had been a very keen stake-net fisher himself previously; and, indeed, I think Mr. Dempster of Skib applied for an interdict against him when he erected a stake-net fishing; for he was amongst our early stake-net fishers on the Firth.

What river fisheries does Mr. M'Kenzie hold, connected with the Tain Firth, as tenant or proprietor?—He fishes first with net and coble at the Bonar Bridge, where all these rivers join in finding their way out into the sea. Then he has the river Carron. He has next the Shin, which is his own property. He has then Mr. Monroe, of Novar's, fishing, which is in what is called the Oykel, or head of the Firth. He has also the fishings of Sir Charles Ross.

Were all these fisheries in such a situation that they might by possibility be affected by the stake nets which were destroyed?—It is possible they might, in some degree, by that and the others which existed in the Firth.

Do you know whether, in point of fact, the produce of these fisheries possessed by Mr. M'Kenzie in the upper part of the river were in any great degree diminished during the time of the stake nets?—I understood, not much; I had access to the principal stake-net fisher, Mr. Grubb, and I did understand from him they were not much affected by it.

Have you any cause of knowledge whether the produce of the river fishery has increased since the stake nets were removed?—I have reason to think that they have decreased; at least I have heard of complaints upon that score. I have reason to know that Ardross himself has complained of a decrease in his fisheries.

Have you in your possession any statement of the produce of the fisheries on the rivers falling into the Tain Firth since the stake nets were put down, or before they were erected?—I have one of them, only the Shin; this was put into my possession as being commissioner of supply, and having occasion to investigate some reductions Ardross claimed for the statute labour, and in order to ascertain as much as possible the value of his fishings, in order that he might be assessed for the statute labour.

[*The witness delivered in the following:*]

STATEMENT of the Quantity of Fish caught at Invershin, from the Year 1792 to 1806, both inclusive.

Years.	Period.	Weight.	Barrels.	——	Weight.	Total Weight.	Total Barrels.
		lbs.			lbs.	lbs.	
1792	from 26 Feb. to 30 June	48,201	120 ½	- - - - -	- -	48,201	120 ½
1793	d° - - d° - - d°	37,293	93 ¼	- - - - -	- -	37,293	93 ¼
1794	d° - - d° - - d°	25,636	64	- - - - -	- -	25,636	64
1795	d° - - d° - - d°	27,123	67 ¾	July following - - fished	2,188	29,311	73 ¼
1796	d° - - d° - - d°	17,589	43 ⅝	July - d° - - - d°	1,446	19,035	47 ½
1797	d° - - d° - - d°	19,730	49 ¼	July - d° - - - d°	874	20,604	51 ¼
1798	d° - - d° - - d°	33,086	82 ¾	July - d° - - - d°	830	33,916	84 ¼
1799	d° - - d° - - d°	27,470	68 ½	July and August - d°	3,906	31,376	78 ⅛
1800	d° - - d° - - d°	17,673	47 ⅛	July and August - d°	3,837	21,510	53 ⅝
1801	d° - - d° - - d°	30,437	76	July and August - d°	3,989	34,426	86 $\frac{1}{16}$
1802	d° - - d° - - d°	19,553	48 ¾	July and August - d°	3,647	23,200	58
1803	d° - - d° - - d°	17,982	44 ⅞	July and August - d°	6,556	24,538	61 ¼
1804	d° - - d° - - d°	10,225	25 ½	July and August - d°	5,666	15,891	39 ⅝
1805	d°, to end of August -	17,242	43 ⅛	- - - - - -	- -	17,242	43 ⅛
1806	d°, to end of August -	23,117	57 ¾	- - - - -	- -	23,117	57 ¾

The above state of the yearly fishings of Invershin, from the year 1792 to 1806, is extracted from my father's book, by

Brora, 3d May 1823. *Geo. Anderson.*

Major Dugald Gilchrist.

25 May, 1825.

Here is also a book kept by the fisher, who fished the river Shin from 1792 to 1806; it is attested by the son of the person who kept the book.

[*It was delivered in as follows:*]

SHIN, 1792:

Feb.	22	12	268
	23	12	291
		24	559
March	1	73	1,661
	2	93	2,160
	3	36	817
	6	45	999
	8	71	1,577
	18	38	830
	21	35	779
	22	40	883
	23	13	289
	24	71	1,598
	28	151	3,251
	29	90	1,965
	31	70	1,547
		826	18,256
April	3	118	2,399
	6	83	1,788
	7	56	1,214
	10	63	1,469
	12	58	991
	14	32	698
	18	14	300
	19	83	907
	20	178	2,864
	23	130	1,875
	24	76	1,062
	26	35	720
	28	52	900
		978	17,197
May	1	42	578
	2	47	790
	4	48	747
	5	49	850
	8	38	626
	11	51	582
	12	64	862
	15	193	2,322
	18	298	3,260
Salted —	19	154	1,572
		984	12,189
February		24	559
March		826	18,256
April		978	17,197
May	19	984	12,189
	Total	2,812	48,201

Major Dugald Gilchrist, 25 May, 1825.

1793:

February - - - - - -	47	1,033
March - - - - - - -	448	10,743
April - - - - - - -	775	17,983
May - - - - - - -	306	6,465
June - - - - - - -	68	1,069
Total - - -	1,644	37,293

1793 - - - - 93 Barrels.

BRORA, 1792:

Feb. - 14 - - - - - -	8	61
17 - - - - -	13	116
20 - - - - -	20	178
22 - - - - -	7	58
23 - - - - -	2	20
27 - - - - -	31	253
	81	686
March 1 - - - - -	15	128
3 - - - - -	18	154
5 - - - - -	59	490
6 - - - - -	9	79
8 - - - - -	3	31
16 - - - - -	7	54
19 - - - - -	15	116
21 - - - - -	37	320
22 - - - - -	50	405
23 - - - - -	14	122
24 - - - - -	35	288
26 - - - - -	38	271
27 - - - - -	42	349
28 - - - - -	66	539
30 - - - - -	36	302
31 - - - - -	17	151
	411	3,799
April - 3 - - - - -	95	783
4 - - - - -	24	212
5 - - - - -	29	244
6 - - - - -	23	192
7 - - - - -	10	102
10 - - - - -	120	1,059
12 - - - - -	31	262
14 - - - - -	9	77
— - - - - -	13	188
16 - - - - -	39	326
17 - - - - -	7	73
18 - - - - -	60	492
19 - - - - -	63	503
21 - - - - -	23	177
23 - - - - -	20	166
24 - - - - -	18	150
26 - - - - -	48	388
30 - - - - -	36	316
	668	4,640

(continued)

Major Dugald Gilchrist.

25 May, 1825.

May	1	9	77
	2	9	98
	4	14	148
	5	57	494
	8	72	664
	10	25	208
	11	1	12
	15	69	668
	16	26	282
	18	72	773
Salted	19	23	221
	22	86	814
	24	23	209
	25	42	453
	26	46	488
	28	24	244
	29	26	294
	30	59	634
	31	43	466
		726	7,247
February		81	686
March		411	3,799
April		668	4,640
May		726	7,247
	Total	1,886	16,372
Shin		1,644	37,293
Broba		941	8,628
Bonar		157	2,297
	Total	2,742	48,218

120 ½ Barrels.

SHIN FISH, 1793.

March	4	13	316
	6	16	380
	8	26	724
	9	27	631
	13	36	246
	14	16	398
	15	63	1,478
	16	35	859
	19	18	399
	20	21	499
		19	530
	23	14	328
	26	144	3,363
	30	20	496
		448	10,743
April	3	19	481
	4	21	525
	5	57	1,339
	6	16	342
	9	228	6,355
	10	178	4,188
	13	30	731
	15	6	129
	17	50	1,150
	20	40	856
	23	30	652
	26	56	1,235
	27	44	1,000
		775	17,983

Major Dugald Gilchrist. 25 May, 1825.

May 1	50	1,178
2	16	384
3	22	500
7	57	1,315
9	26	596
11	16	362
14	6	742
15	20	446
17	36	632
21	16	305
24	16	241
28	5	76
29	20	288
	306	6,465
June 1	27	490
3	5	59
4	36	520
	68	1,069

BRORA, 1793:

Feb. 22	3	24
27	2	17
	5	41
March 6	13	9
8	5	44
11	8	60
14	3	21
16	11	100
19	8	59
20	7	56
23	33	282
28	20	158
30	7	58
	115	947
April 3	2	30
4	8	73
5	28	228
6	12	103
9	7	57
10	6	57
13	64	528
15	4	28
19	12	118
20	8	65
23	24	192
26	8	69
27	37	316
29	38	296
	258	2,160
May 1	28	240
2	12	93
3	14	126
7	9	87
9	6	42
11	17	141
14	60	496
15	9	75
21	7	52
24	13	116
25	11	119
29	7	64
	193	1,651

Major Dugald Gilchrist.

25 May 1825.

June	3	16	120
	4	29	233
	6	48	416
	10	24	295
	11	64	592
	13	31	346
	15	18	181
	18	9	113
	20	20	231
	22	9	99
	25	7	104
		275	2,730
July	1	31	406
	2	28	176
	4	20	103
	5	16	214
		95	1,099
February		5	41
March		115	947
April		258	2,160
May		193	1,651
June		275	2,730
July		95	1,099
	Total	941	8,628

21 ½ Barrels.

BONAR, 1793:

March	14	1	25
	26	1	29
		2	54
April	5	1	19
	9	20	403
	10	9	200
	12	1	21
	27	14	276
		45	919
May	2	2	40
	3	6	96
	7	1	20
	14	8	98
	17	10	136
	20	6	64
	24	12	161
	28	33	364
		78	979
June	1	22	253
	4	12	146
		34	399
	Total	159	2,351

Major Dugald Gilchrist.

25 May, 1825.

BRORA FISH, 1794:

Jan. - 27	7	60
Feb. - 26	3	21
March 29	410	3,221
April - 30	308	2,331
May - 31	585	4,971
June - 30	256	3,193
July - 2	36	506
Total - - -	1,605	14,304

BRORA, 1795:

March 25	142	1,083
April - 30	332	2,649
May - 30	280	2,470
June - 31	297	2,527
July - 30	936	6,809
Aug. - 18	320	3,248
Total - - -	2,307	18,786

Helmsdale - - - 4,680 - - 31,115

SHIN FISH, 1794:

Feb. - 26	12	264
March 29	374	8,231
April - 30	387	6,932
May - 31	446	6,552
June - 30	283	3,657
Total - -	1,502	25,636

1795:

March 26	102	2,030
April - 30	674	13,682
May - 30	409	7,864
June - 31	264	3,547
July - 29	281	2,188
Total - - -	1,730	20,311

BRORA, 1796:

Feb. - 20	94	716
March 31	402	3,027
April 30	286	2,704
May - 30	265	2,186
June - 30	322	2,753
July - 30	569	4,658
Aug. 5	118	1,101
Total - - -	2,056	17,145

Major Dugald Gilchrist.

25 May, 1825.

1797:

February - - - - -	120	944
March - - - - * 1,305	183	* 1,305
April - - - - - -	469	3,590
May - - - - * 2,965	302	* 2,965
June - - - - * 2,295	187	* 2,292
July - - - - - -	233	3,178
- - Grilses - - - - -	446	2,014
August - - - - - -	118	1,710
- - Grilses - - - - -	103	823
Total - - -	2,161	18,821

BRORA SALMON, 1798:

February - - - - -	44	377
March - - - - - -	263	2,094
April - - - - - -	508	4,046
May 31 - - - - -	654	5,182
June - - - - - -	259	2,781
July - - - - - -	355	4,814
August - - - - - -	131	1,877
- - - Grilses - - - -	567	2,353
- - - Salted - - - -	89	1,221
Total - - -	2,870	24,745

1798:

February and March - - -	336	2,433
April - - - - - -	535	4,059
May - - - - - -	521	4,480
June - - - - - -	—	3,561
July - - - - - -	233 — 977	7,270
August - { Salted - - - -	124 — 1,809	9,496
August - { Grilse - - - -	984 — 5,687	
Total - - -	- - - - -	29,299

SHIN FISH, 1796:

Feb. - 20 - - - - -	18	396
March 31 - - - - -	151	7,542
April 30 - - - - -	257	5,106
May - 28 - - - - -	171	3,337
June - 25 - - - - -	75	1,208
July 27 - - - - -	144	1,446
Total - - -	816	19,035

1797:

February - - - - -	20	439
March - - - - - -	260	5,641
April - - - - - -	369	6,532
May - - - - - -	223	3,173
June - - - - - -	261	3,659
- - Grilses - - - - -	60	286
July 21 - - - - -	64	874
Total - - -	1,257	20,604

Major Dugald Gilchrist.

25 May, 1825

SHIN SALMON, 1798:

February - - - - - -	9	204
March - - - - - -	270	5,840
April - - - - - -	653	1,193
May - 31 - - - - -	698	9,250
June - 30 - - - - -	404	4,599
July - 18 - - - - -	59	830
Total - - -	2,093	33,916

Salted 207 - - 1,312 lbs.

1799:

February and March - - -	594	1,290
April - - - - - -	385	888
May - - - - - -	192	374
June - - - - 56 Gr.	194	218
July - - - - 332 Gr.	127	330
August - - - - 62 Gr.	23	76
Total - - -	- - -	3,176

SHIN, 1800:

March - - - - - -	143	2,853
April - - - - - -	419	8,556
May - - - - - -	236	3,449
June - - - - - -	204	2,815
July - - - - - -	150	1,987
- - - Grilses - - - -	366	1,670
August - - - - - -	3	45
- - - Grilses - - - - -	24	135
Total - - -	- - -	21,510

BRORA, 1800:

March - - - - - -	125	937
April - - - - - -	451	3,383
May - - - - - -	262	2,206
June - - - - - -	227	1,411
- - - Grilses - - - -	372	1,266
July - - - - - -	230	3,263
- - - Grilses - - - -	1,255	4,759
August - - - - - -	118	1,747
- - - Grilses - - - -	475	2,572
Total - - -	- - -	21,544

SHIN, 1801:

February - - - - -	49	1,008
March - - - - -	328	7,014
April - - - - - -	354	7,357
May - - - - - -	691	10,513
June - - - - - -	240	4,545
- - - Grilses - - - -	179	
July - - - - - -	170	3,163
- - - Grilses - - - -	205	
August - - - - -	23	826
- - - Grilses - - - -	104	
Total - - -	- - -	34,526

86 Barrels.

Major Dugald Gilchrist.

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BRORA, 1801.

January	11	38
February	86	642
March	351	2,642
April	569	4,341
May — Gr. 55	410	3,427
June — Gr. 683	156	3,829
July — 1,448	188	8,181
August — 369	192	5,010
September — 186	43	1,520
Total		29,680

74 Barrels.

SHIN, 1802:

March	75	1,599
April	289	5,932
May	355	5,981
June	490	6,041
July	226	2,964
August	S. 40 G. 37	683
Total	1,512	23,200

BRORA, 1802:

Feb.	—	—
March 31	212	1,499
April - 30	459	3,302
May - 28	482	3,603
June - 29	436	3,738
July - 31	1,035	6,878
Aug. - 30	636	4,842
Sept. 9	92	745
Total		24,607

61 ½ Barrels.

1803:

March 31	197	1,316
April - 30	350	2,454
May - 31	318	2,254
June - 30	273	2,017
July - 30	466	3,326
Aug. - 31	465	3,565
Sept. 8	187	1,031
Total		15,963

39 ½ Barrels.

SHIN, 1803:

March 31	206	4,018
April - 30	493	10,396
May - 28	102	1,882
June - 30	147	1,686
July - 28	876	5,230
Aug. - 10	223	1,326
Total		24,538

61 Barrels.

Major Dugald Gilchrist.

25 May, 1825.

1804:

March 31	91	1,667
April - 28	228	4,157
May - 30	151	2,518
June - 30	206	1,883
July - 31	582	4,724
Aug. - 24	204	942
Total		15,891

BRORA, 1804:

March 31	105	1,389
April - 27	427	3,006
May - 30	401	2,624
June - 30	443	2,602
July - 31	593	3,290
Aug. - 29	578	3,501
Sept. 8	69	399
Total		16,811

1805:

SHIN	17,242
BRORA	18,165

1806:

SHIN	23,117
BRORA	21,694

I certify this to be one of the books belonging to my father, Mr. William Anderson, Brora, who was manager for the Shin and Brora fishing during the years from 1792 to 1806; and that I believe this book to contain a true state of the produce of those fishings during those years,

Geo. Anderson.

From your knowledge of the state of the fishery in the north, whether do you consider that Mr. M'Kenzie, of Ardross, has an interest for or against stake nets?—I consider him to have a very considerable interest and bias against them, as his conduct evidently showed.

But whether do you consider that his interest in the fishery is such as to make him an enemy to stake nets, or otherwise?—I think, to make him an enemy to stake nets, that is his interest.

Has his interest, in that respect, varied since the time when he had a stake net of his own, and which he has since discontinued; has he acquired other fisheries?—He has acquired the river Shin, in property, and almost all the other fishing rivers on lease; all of them but one, Lady Ashburton's.

Have there been any cruives recently erected in any part of the rivers falling into the Tain firth?—Upon the river Carron there was one about two or three years ago, and still is.

By whom were those cruives erected?—By M'Kenzie, of Ardross, and on the property of Charles Ross, of Invercharron, esq. sheriff of Sutherland.

Do those cruives extend from bank to bank?—They do.

Are you acquainted with a place called the Kyle of Sutherland?—I am.

Do the rivers Casley and Oykel fall into the Kyle?—They do.

Are you acquainted with any net used, and extending from one side of the Kyle to the other side?—I am, perfectly.

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By whom was the net used?—By Mr. M'Kenzie, of Ardross.

What was the object and effect of the net?— The object of it appeared to be to keep the fish all down below the net, that he might with greater ease fish them, and with more success.

Be so good as describe this net, and the manner in which it was applied, and during what time it continued to be so placed?—The net is at this moment in existence, and has been for years back; it is a stronger net than the ordinary fishing net with sinkers, which carry it to the bottom, and is almost stretched across from bank to bank; and, except with floods of water, and what we call speits, I do not see what fish can get up.

During what period of the year is the net permitted to remain?—It generally commences with his fishing, which is in March, and it ends in August, when he ceases fishing; on the 25th August.

Then it is used during the fishing season; not maintained there during the close time?—It is.

Are there any fisheries or rivers above, which, by this net, are deprived of the fish that would naturally ascend to them?—There is one in particular, that is not let in lease to Mr. M'Kenzie, that belongs to Lady Ashburton, about which there is a process of law at this moment in the court of session.

What is the object of the process?—To have this net pulled down.

[*The witness here delivered in the condescendence, (in the action stated to be pending,) on the part of Mr. Mackenzie, of Ardross, as follows.*]

"First Division, Feb. 19th 1825.

Condescendence.—*Murdo Mackenzie*, Esq. against *Lady Ashburton*; James Macdonell, W. S. Agent for Mr. *Mackenzie*. John Mowbray, W. S. Agent for *Lady Ashburton*. Sir R. Dundas, Clerk.

"Edinburgh, February 4th, 1825.—The Lords having resumed the consideration of this petition and complaint, and advised the same, with the answers, replies and duplies, appoint, before answer, mutual condescendences to be given in by the parties, explanatory of the nature of the fishings in question, and of the fact of the stent nets complained of having or not having been used subsequently to the date of the interdict, the said condescendences to be printed, and put into the boxes within fourteen days from this date, under an award of 40*s.* sterling; and further, appoint the condescendence for the complainer to be signed by her factor, and the condescendence for the respondent to be signed by himself, or the person who superintends the said fishings for him.

(signed) *C. Hope*, J. P. D."

"Condescendence for *Murdo Mackenzie*, Esq. of Ardross, in the Petition and Complaint at the instance of the Right honourable *Anne, Lady Ashburton*, against him.

In obedience to the foregoing interlocutor, the respondent condescends and says, and offers to prove,

1st, That for some time previous to the month of March 1824, the fishermen employed by him at the salmon fishing station of Attindaris, on the Kyle of Oykel, the property of Mr. Monroe, of Novar, had set up or used a *bar* or *stent* net stretching in a straight line right across the water, from the water's edge on the south side to within a certain distance of the opposite shore, (which, being unmeasured, cannot be stated with exactness;) which net was fixed or stationary, and not used or calculated for catching fish, but solely as a bar or obstruction to their passage. This net was the one complained of to your Lordship by the noble petitioner as an innovation not sanctioned by usage, and as a net which had been already declared by the court illegal elsewhere. It was this species of net or innovation which was interdicted by the lord ordinary.

2d, That immediately on the interdict being intimated to him, the respondent gave directions, both *written* and verbal, to his fishers to discontinue the said species of net so complained of and interdicted, and to return to the ancient established mode of fishing by '*stell net*,' a species of net quite different from the stent bar or net complained of.

3d, That the respondent was so anxious that the stent or bar net should be discontinued, that he gave directions to the managers of his other fishing stations to repair to the spot, and see that the interdict was strictly observed; and they repeatedly reported, that the interdicted net was discontinued.

4th, That in fact fishing by stell nets is a mode well known and understood by practical persons as totally different from the stent net originally complained of; and fishing by stell net is the ancient and established mode of fishing which was practised, past all memory, at the fishing station in question, and has never been declared illegal.

5th, That at Attindaris, or elsewhere, the respondent has fished only with stell or draught nets from the period the interdict was intimated as aforesaid, and has not used any other device for fishing, or obstructing the passage of the fish in terms of the interdict; the stent or bar net which was interdicted having been completely demolished, and never again used since the passing of the interdict. In respect whereof, &c.

M. Mackenzie.
R. Jameson."

Have you a copy of the condescendence on the part of Lady Ashburton in that action?—I have.

Major Dugald Gilchrist.

25 May, 1825.

[*It was delivered in as follows*]

"Condescendence of the Right honourable *Lady Ashburton*, Complainer, against *Murdoch Mackenzie*, Esq. of Ardross.

THE complainer condescends and says, primo, That the net against which, as well as against any similar net, the complainer applied for and obtained an interdict, was a net stretched from the south or Rosshire side of the united stream formed by the junction of the river Casly and Oykell, to within six yards of the Sutherland side of the said stream at a place called Achindarrish, about two miles below the junction, and where it still retains the appearance and character of a river in the strictest sense. The interdict was granted on the 8th March 1824.

Secundo, That the interdict so granted by the lord ordinary was intimated to the defender's agent in Edinburgh on the 17th March, and to the defender himself personally, so early as the 25th March 1824.

Tertio, That notwithstanding this, the defendant has a cross-net up at the very same place so late as the 1st and 2d days of June thereafter.

It is impossible for the complainer to know whether this was or was not the same identical net which stood there before, but it was precisely similar. Moored on the Rosshire or south side, about flood mark, on the top of the bank, and stretched across to within six yards of the north or Sutherland side, the water at the end of the net being about knee deep, with the net nearly full.

Quarto. That the net which is admitted by Ardross to have been afterwards, and to be still kept up under the denomination of a stell net, is also of the same description. From being stretched in an oblique direction it cannot stretch quite so far across, but it is constantly fastened at the northern extremity by a kedge-anchor; and this, a contrivance which would be not merely useless, but pernicious, with a view to the drawing of the net for catching fish. Its object is to enable the defender to keep the net constantly up as an obstruction to the passage of the fish; and the complainer avers that the defender did not content himself with using the net during the few hours of the day that the fishermen were at work, but kept it up every night and day in the week, except Sundays, thus making it fixed and permanent machinery, precisely like the other.

In respect whereof, &c.

(signed) *D. Gilchrist*, Factor for Lady Ashburton."

The action of law is not yet decided?—It is not.

Do you consider that these mutual condescendences give a complete view of the point depending in the process at law?—I think they do.

Do the stake nets which existed formerly in the Tain Firth extend into the mid channel, or to low-water mark?—To low-water mark.

Do you mean to say that while the stake nets formerly used left the mid channel free, the net now in use by Mr. M'Kenzie on the Kyle extends from bank to bank, or nearly so?—No boat can navigate on that part of the shore where the net is, it is so shallow; so nearly does the net stretch across the whole channel of the river; I have myself waded to it. The water is not above from knee to ancle deep.

Then you consider that Lady Ashburton's fishery is materially injured by the net which is there in use by Mr. M'Kenzie?—I certainly do; it was the object of this law to remedy the evil.

Can you give the Committee any notion of the value of Lady Ashburton's fisheries, either before the net was placed, or since it has been erected?—I cannot, fully, nor strictly; it has considerably diminished in value since this bar net has been used.

What mode of fishing is practised on Lady Ashburton's property?—Her Ladyship's property is a joint fishing with Sir Charles Ross; she has let her one-half of the fishing of it, and it is fished by net and coble; and at falls by means of a net I cannot well describe, a poke net. They catch a great many fish at a waterfall; they go into the water and beat down the fish, and catch them at these falls with a sort of bag-net.

Do you consider that the stake nets, as formerly in use on the Tain Firth, were injurious to navigation?—No, I do not think they were; quite the reverse.

Did you ever hear of any vessel or boat being put to inconvenience or danger during their existence?—Never in my life; if it had happened I should have heard of it.

Had you any particular opportunities of observing their effects in this respect?—I had.

Did you ever hear or know of any of Mr. M'Kenzie of Ardross's boats being

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injured, or the life of his fishermen being in danger by the stake nets?—No; I think they must have gone very wilfully in the way of danger, if they were.

What should you believe to be the width of the mid channel which existed between the stake nets there erected on the south and the north sides of the Firth?—I cannot think that there could be much less between the two points of the nets than from a mile to three fourths of a mile.

What length do you think the stake nets of each side respectively extend from high-water mark into the Frith?—Perhaps 350 yards; the length is not the same, some situations afford much greater room for going out into the shallow.

Can you state the extreme length of any one, in short the maximum and minimum of these nets?—I think there was one net that might have been 500 in length; and at one station there is a very great shallow, and there was none immediately opposite to it; it did not go near the channel.

Was that the net which M'Kenzie destroyed?—It was not, it was lower down; I think he destroyed two, to the best of my recollection, but there is one I can distinctly speak to.

Can you state your belief as to the width of the channel which was unobstructed by the stake nets at the point where the net was placed which M'Kenzie destroyed?—I should think, full a mile.

Have you any knowledge of the state of the salmon caught in the rivers which fall into the Tain Firth, at the commencement and at the close of the fishing season?—I have; I think, that at the commencement and close of the season the fish not only draw off but become very bad. I do not think there are many good fish caught there, at the head of the firth, till April; at least I had myself occasion to fish for trout. I have frequently, in this very season, and I have caught quantities of foul fish in the month of March, which I afterwards allowed to escape.

At what time then do you think that the fishing season ought to commence?—I do not think at that part that they can commence it with any sort of success or benefit, or get good fish, before the middle of March, or from that to the first of April.

To what rivers and friths do you apply this observation and opinion?—The head of the Dornoch frith chiefly, and those rivers that fall into it, the Oykel, the Casley, and the Anec.

At what time does the fishing season actually commence?—I think they very seldom commence before the 1st March there.

Have you any personal cause of knowledge that salmon are sometimes caught in February or March in an unspawned state in the river Oykel?—I have just mentioned the circumstance, that I myself saw them in a foul state, unspawned, and immediately after spawning.

Have you seen that in former years as well as in the present?—I have, on several occasions.

Is it then upon your experience that you found the decided opinion you have now given?—It is; from the experience of the last twelve or thirteen years.

When do you think the fence time or close time ought to commence on the rivers of which you have spoken?—I really think that the present fishing time is continued long enough; the 24th or 25th August.

For what reason do you state that opinion?—The fish not only draw off, but they are very bad when taken after that period, both the grilse and salmon; they become quite thin.

Do you conceive them to be bad because they are approaching to the season of spawning?—I do.

Have you any means of stating the period which you think generally intervenes between a fish ceasing to be in good condition, and the actual time of the spawning of that fish?—I have no means of knowing.

You have stated that there are unspawned fish in February and March, and that the fish begin to be in bad condition in the end of August; does it not follow, as a necessary inference, that a considerable period must intervene between their ceasing to be in a good condition and their actually spawning?—No doubt of it.

Do you believe that the fish ascending the rivers in bad condition in September remain in those rivers from that time until the time of their spawning?—I think they do in that particular part.

Do you know whether the fish caught in the upper part of the rivers to which you have adverted after August are in a good state?—No, they are in a very bad state

Do

Major Dugald Gilchrist.
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Do you consider that the close time is strictly observed on the rivers with which you are acquainted in the north of Scotland, or whether there is much poaching on the rivers during the close time?—A considerable deal of poaching, but I believe the period is very attentively attended to by the fishers.

You mean to state, therefore, that, as far as the authorized fishers are concerned, the close time is observed, but that there is a considerable extent of poaching, which is very injurious during the close time?—I do.

Have you ever considered whether it would be advantageous to the fisheries that one uniform close time should exist, in order to prevent salmon being sold in the market at improper seasons?—That has been the subject of conversation with me and several fishers; and I consider, myself, that probably from the first to the middle of March ought to be the period to commence the fishing, and to cease in August; from the 20th to the 25th I think there is very little good fishing. I allude entirely to that part of the country where I am myself.

Do you consider, therefore, that, generally speaking, in the north with which you are acquainted, a uniform close time, nearly what you have stated, would be of general advantage?—I do.

Do you state this opinion upon a principle of compromise, each fishery giving up something in order to attain a common benefit?—Surely, it must be so.

Have you a general knowledge of the sea coast and friths of the north of Scotland?—Rather a superficial one, I think. I *know* the friths of Dingwall, Tain and Inverness.

Have you any reason to believe that there are many situations in which stake nets might be used, but where no other modes of fishery are applicable?—A great many indeed.

Do you think that such stake nets would be injurious to the permanent interests of the river fisheries, or that they might exist without any considerable disadvantage to them?—I am convinced they might without any very considerable disadvantage to them, and that a great many excellent fish would be caught by means of those stake nets which never go up those rivers above.

Is it your opinion, that any injury that might be sustained by the river fisheries would arise from an increased supply of salmon at market, or from a diminished supply taken within their own fisheries?—I could suppose they would suffer more from an increased quantity at market, as it would reduce the price of the salmon.

Do you believe that the general market of Great Britain, with all the facilities now existing as to conveyance, might be extended so that an increased supply would not considerably affect the price?—I think it might.

Are you of opinion therefore, that the salmon fisheries might be extended, and that by proper measures the price to all might remain as good as it now is?—I am fully of that opinion.

Henry Howard, Esq. of Corby Castle, Cumberland, called in; and Examined.

Henry Howard, Esq.

CAN you afford the Committee any information with reference to the salmon fisheries of the river Eden, in the county of Cumberland?—I can merely speak to that which belongs to me, and belonged to my father before, and which was under my superintendence. We are about fifteen miles from the sea, and I have one side of the river Eden, in my own right, of the manor of Corby, about five and six miles of fishery; and on the other side I rent, under the Dean and Chapter of Carlisle, rather more than six miles; they are not entirely opposite one another in the whole distance, but partly go together; mine extends lower down the river, and the other higher up. I should mention, that we have an ancient salmon lock on my own side, in which we take the greatest part of the fish. In the manor of Corby there are one or two places where they do draw nets, but they are not good draught, because we have never thought it worth keeping up nets, since the bottom is so formed of large stones that it destroys the nets, and it is not much use using them; on the other side there is not one draught net that I know of. The river has steep banks, and the bed of it is composed of large coble stones, or entire rock; and higher up the river it is so much in that way, that I do not believe they are able to use a sweeping draught net. They now and then take them in flood, with a hand net, and there are poachers, who I dare say manage it otherwise; but the general way of taking, in the parts where we have not the salmon lock, which I mentioned, is by lights, and striking with the harpoon, or by these hand nets,

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or else by angling, and cross-angling two rods; so that what I let off is very little in amount owing to the want of means of fishing.

Can you state to the Committee any general view of the value of the several fisheries to which you have adverted?—Of late years it has certainly fallen off very much. When I came from abroad, which was in the years 1785 and 1786, our own fishery was not of great value, because Lord Lonsdale and the Corporation of Carlisle had nets quite across the river. By process of law these were taken away, and the fisheries became of more value, and I have here made a statement which will show you what was the quantity of fish we used to take from time to time for ten years; and during this time I have arranged it by months, that you may be able to form your idea of what is the time on the river Eden when the fish do come up. The reason it is not continued is that I then attended the militia, and the accounts were only sent to me by letters.

[*Mr. Howard delivered in the following:*]

ACCOUNT of Salmon taken in the river Eden, in the county of Cumberland, in the manors of Corby and Wetherall, in the course of ten years; viz. from 1784 to 1793, both included; showing the number of Salmon taken during each month in those years, in order to ascertain the times of the year the Salmon run up that River, with memoranda containing a brief statement of his views with reference to the Salmon Fishery in that river.

Salmon Caugh.	1784. From Dec. 1783 to Sept. 1784.	1785. From Dec. 1784 to Sept. 1785.	1786. From Dec. 1785 to Sept. 1786.	1787. From Dec. 1786 to Sept. 1787.	1788. From Dec. 1787 to Sept. 1788.	1789. From Dec. 1788 to Sept. 1789.	1790. From Dec. 1789 to Sept. 1790.	1791. From Dec. 1790 to Sept. 1791.	1792. From Dec. 1791 to Sept. 1792.	1793. From Dec. 1792 to Sept. 1793.	Summary of the Number of Salmon taken during the respective Months in the course of Ten Years.
In December -	24	–	4	32	8	1	8	4	25	16	122 in December.
In January -	1	65	16	149	15	3	25	11	67	43	395 in January.
In February -	5	23	71	102	19	34	33	46	164	20	514 in February
In March -	44	70	180	188	70	61	71	107	84	75	949 in March.
In April -	75	216	89	73	82	97	57	118	202	64	1,073 in April.
In May - -	107	29	59	26	25	54	16	65	82	42	505 in May.
In June - -	91	17	–	14	12	62	42	16	45	4	303 in June.
In July - -	102	–	49	42	60	36	72	67	48	29	520 in July.
In August - -	30	45	29	31	3	24	51	49	28	56	346 in August.
In September -	18	32	41	15	18	36	25	16	37	18	256 in September.
Not entered with date	5	12	7	10	8	32	27	–	–	–	101 not entered with a date
Number each Year	522	506	546	681	320	439	427	499	782	367	
Aggre. weight - *lbs.*	4,870	5,810	6,105	8,501	3,795	5,816	5,203	4,755	8,614	4,381	
Taken with Harpoon	10	37	102	96	30	not distinguished.					

MEMORANDA.

Before the year 1804 the close time in the river Eden was from the 24th September to the 30th November. In the year 1804 the local act extended the close time to the 31st December.

The new fish run up the river Eden near three months before they go up the Esk, which conflues with the Eden in the Solway Firth. The Irthing falls into the Eden, and may be a fourth of its water; but no salmon run up it, excepting in the spawning time, nor into the Calden; and I believe that the salmon are two months later in going up the Derwent than up the Eden.

It will be seen by the foregoing statement, that a good many salmon run up the Eden in January; but that the month of February is one of the greatest produce, and during those months the salmon sell at the very highest price.

The extension of the close time in the river Eden to the 1st March would be depriving that river of the chief advantage which nature has given to it; and as the salmon spawn out much sooner than in any other river, it would be a useless privation. Perhaps the close time might be usefully extended to the 10th or 12th January, and begin ten days sooner. In between five to six miles of river in the manor of Corby, and higher up the river, there are not more than one or two tolerable places for a draught net, on account of the bed being either rock or large stones. The most of the fish are taken in the salmon locks, some in angling, or with the large hand net, and many by lights. In the manor of Wetherall, about six miles of river, and above it, there are no places for drawing nets; and if they were deprived of using the harpoon, the fisheries would be of no value. By the act of

1804 it was thought, that by the prohibition of lights, and harpooning, till the 10th March, not only no spawning fish would be taken by that mode of fishing, but that all that had spawned would be certain to have returned to the sea. If this was prohibited in my part of the river, and above, no salmon would stir or be taken when the water is low, and it would nearly make the fisheries useless. The salmon seldom run up the river when there is not a great rise in it by rain. Fewest are caught in June, on account of there being less rain during that month than any other.

Henry Howard, Esq. 25 May, 1825.

May 25th, 1825. *Henry Howard.*

Can you state to the Committee any thing respecting a practice in the country with which you are acquainted, as to using salmon roe as a bait for fish?—It is the best bait for taking trout, and a great inducement for killing the salmon out of season in the close time; for the persons prepare it, and sell it sometimes as high as 7*s.* a pound, which would enable them to make a profit of 17*s.* or 18*s.* of a single fish, which otherwise would be worth little or nothing, and it becomes thereby a great temptation for their destruction.

Have you any reason to think that this practice has prevailed to any extent in Cumberland?—To a very great extent; there are sellers of roe and preparers of it, all along the river in every place. They sell it not for Cumberland alone, but it goes elsewhere.

Should you therefore think it desirable, that in any law to be passed for the regulation of the salmon fisheries, provision should be made to prevent such an injurious practice?—I think it most desirable the law should prohibit the having it, or preparing it, in the strongest manner that could be enacted.

Mr. *James Poole*, called in; and Examined.

Mr. James Poole.

WHERE do you reside?—At Blacket Lees, near Annan, in the county of Dumfries.

How long have you been acquainted with the fisheries in the Frith of Solway, and the rivers which flow into it?—I have been acquainted with the river Annan for fifty years.

What are the modes of fishery practised on the river Annan?—The modes of fishing practised on the river Annan are draught and sailing nets, with trows and boats.

Have the fisheries on the river Annan increased or decreased?—They have decreased.

What do you consider to be the causes of this decrease?—I consider the cause to be that the fish have not been protected in the close time.

What is the close time on the river Annan?—The close time on the river Annan is from the 25th September to the 10th March

Is that under an Act of Parliament of 1804?—Yes.

Do you consider that is the proper close time for the river Annan?—It was thought they should begin earlier than that, in March, and to continue till the 1st October.

When do the fish begin to ascend the river Annan for the purpose of spawning?—In August and September.

Are they therefore in August and September in a worse condition than they are in June and July?—They are coming nearer the spawning, although they are very good fish at that time.

What size do you think the roe may be in a full-sized salmon, in the beginning of September?—I never examined the full size. I really cannot say to the extent of the full size; I never took particular notice of that.

Have you any knowledge of the stake-net mode of fishery as practised on the Solway Firth?—I have known the Solway Frith nearly as long as I have the river Annan.

Do you consider that the stake-net mode of fishery is injurious to the river fishery?—They would take a part of the fish that would come into the river.

Do you consider that all stake nets on the Solway Frith are at present regulated as they ought to be?—I consider they are so.

But do you not think that stake nets might be so regulated and placed, as to take a considerable quantity of fish, and at the same time not to injure the river fisheries?—I do not think they could be placed in any other way than they are at present.

Are there in the Solway any stake nets, such as are called ebb nets, that is to say, receiving the ebb tide and not the flood tide?—There are.

Mr. James Poole.

25 May, 1825.

Do you consider that an ebb net takes salmon in their way to rivers?—It depends in what situation the net is placed.

Are the stake nets in the Solway entirely composed of net work, or is there wicker work?—There is wicker work at the bottom in a good many.

Do you consider that such wicker work tends to obstruct the free passage of the salmon fry to the sea?—No, it does not.

Would it be injurious to the proprietors of stake nets that they should be required to form them entirely of net, to the exclusion of all wicker work?—It would be injurious, because the netting, lying so close on the sand, would rot away.

Is that the only reason why you think the wicker work ought to be permitted?—Yes.

Did you never see salmon fry taken or obstructed by the wicker work of these stake nets?—No, I never did.

Are the stake nets in the Solway frith placed so as to extend from high water to low-water mark, or do they extend further than low-water mark into the channel of the frith?—The stake nets go no further than low-water mark.

Is it low-water mark at spring tides, or at neap tides?—At spring tides.

What is the length of any of the stake nets with which you are acquainted?—Five or six hundred yards, I think; I never measured them.

Whether do you consider that the fish taken in the stake nets, or the fish taken in the river Annan, are of the best quality?—They are equally a good quality when they are taken in the mouth of the river; but if you go far up the river they come to be of a worse quality.

You state that they are equally good if taken in the mouth of the river; do you mean taken within the river where the tide reaches?—Yes, or even a little above, if they have not been long in the river.

What do you consider to have been the chief cause of the decrease of the fisheries with which you are acquainted?—The chief cause has been, that the close time was not protected as well as it ought; people do not come forward to protect it in the way that ought to be done; and the law being so defective, that when they were taken before the judges, there was no getting them punished.

What do you believe to be the defects of the law to which you allude?—The defect of the law was, in some cases, that every man could prosecute; one poacher prosecuted another, and then gave up his action; it was what we call a mock prosecution, and consequently no punishment ensued.

But was there any reason why you, or any other person, should not conduct a real prosecution instead of a mock prosecution?—When they heard we were preparing to prosecute they took such steps as to fetch the first prosecution.

Are there any measures which you believe would be calculated to protect the fisheries in the river, and in the frith?—Yes.

State them?—By conservators and water bailiffs.

Have you not at present conservators of the river?—We had; there were some conservators and water bailiffs, but they were not to the number they ought to be.

By whom were they paid?—For some years past they were paid by the proprietor and the tenant.

What other means would you recommend to give better protection to the fisheries in the close time?—To have the law so fully expressed, that persons who poached the river could not get the better of it by evading the law.

From your experience, can you state to the Committee, whether the 15th September, and the 1st March, is the best period for the close time to commence, and cease in the Solway firth, and the rivers following thereinto?—I think the close time ought to commence the latter end of September, or the 1st October.

And when cease?—On the 1st March, in the rivers Annan, Nith, and Esk; but in the river Eden, and the Solway frith, on the 2d February.

Why do you make a distinction between the river Eden, and the Solway frith, as requiring a different period from the other rivers flowing into the Solway frith?—The river Eden is a warmer river, and the fish go earlier up into it; they go up the Solway to go to the river Eden.

Are there any mill dams, or other obstructions, on the river Annan, which impede the breed of fish?—There are mills on the river Annan which destroy the fry when they are coming down the mill leads.

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25 May, 1825.

Is there no interruption to the breeding fish in ascending the river?—Where there is no gap or gullet left in the call it impedes them going up the river.

Is there any such impediment in the river Annan?—I do not know there is any such impediment in the river Annan; they have all gaps and calls, more or less, but they may not be to the full extent they ought to be.

Is there a slap in Mount Annan call?—There are three calls there, I believe; there is some, little more or less, but the extent I do not know.

Are they sufficient to admit of the ascent of the salmon up the river without interruption?—When the river is in flood they can go up.

But when the river is not in flood, the slap is not sufficient to admit of their ascending the river?—When the river is low I think the gaps are not sufficient.

What size of gap should you consider sufficient to enable fish to get up; what depth and breadth?—Six feet is generally what has been understood to be the width of it, and the depth of it ought to be to the bottom of the channel.

Jovis, 26° die Maii, 1825.

THOMAS FRANCIS KENNEDY, ESQUIRE,

IN THE CHAIR.

Lord Viscount *Forbes*, a Member of the House, called in; and Examined.

Lord Viscount Forbes.

26 May, 1825.

IN what part of Ireland does your lordship reside?—In the county of Longford.

Have you resided there for a considerable period, within late years?—For the last ten or twelve years, almost constantly.

Have you been in the habit of directing your attention at all to the salmon fisheries in the part of the county where you reside?—Yes; from this circumstance, that the river Shannon runs close to my father's place of residence.

Are you of opinion that the salmon fishery has increased or decreased of late years?—I should say that the breed of fish has considerably decreased.

Have you formed any opinion as to the causes to which such decrease is to be ascribed?—I ascribe it to the destruction of the fry, from the practice which prevails of fishing with nets in eel wears during the months of April and May, when the fry run down upon warm days; and also from the practice which exists of setting a net, which they call a drum net, in the eye of the wear, to kill the fish which go up to spawn in the month of October and beginning of November.

By what persons are those practices resorted to?—By the occupiers of the eel wears and mills; in many instances I have known several horse loads of fry taken upon the smaller rivers which fall into the Shannon, by people who are in the habit of selling them for the purpose of feeding pigs; I have seen the fry carried in panniers upon horses, and sold at a very cheap rate for that purpose.

Do you conceive that it would be any hardship to the proprietors of eel wears, to be prevented from using them during the season in which the fry descend?—Certainly not; for the quantity of eels taken at that season of the year is very trifling, and at present in Ireland they are prevented by law from setting the nets during the Months of April and May, and at all seasons of the year, which would prevent the fish coming up in the eye of the eel wear, but the difficulties which are thrown in the way of convicting those persons from the form of conviction, and warrant also, not having been laid down in the Act of Parliament, renders it almost nugatory.

In what way does your lordship think that the law might be rendered effectual in those respects?—I should think the most effectual manner, in the case of mills, would be by placing grates that should prevent the fry coming down the mill-stream, as in most mills they have a box or trap, in which the fry are taken in coming down, and in which the fish going up to spawn are also taken. A great objection seems to exist on the part of millers to the erection of those grates, which, I own, I conceive that local circumstances might, in some cases, render difficult; in that case, I should suggest that a power of search should be given to all peace officers, upon a magistrate's warrant, if reasonable ground of suspicion exist that

 improper

Lord Viscount Forbes.

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improper engines are used; that upon finding traps or nets for the destruction of fry, a fine to the amount of 5*l.* should be awarded before the magistrate, for the first offence, or one month's imprisonment; 10*l.* or two months imprisonment, for the second offence; that no appeal should be lodged against the conviction unless the amount of the fine were actually paid into the magistrate's hands.

Upon what ground would you suggest it as necessary that the fine should be deposited in the magistrate's hands before an appeal should be permitted?—Because I have seen, that in cases of appeal to the quarter sessions the conviction has been evaded from some technical informality in drawing it up, and in many cases where the conviction has been affirmed, the fine has not been paid.

Should you think that if the protection to the fry and spawning fish were rendered effectual in the river with which your lordship is acquainted, that the breed of salmon might be very generally restored, and that a valuable salmon fishery might exist where it is now very much otherwise?—I am quite convinced of that fact; but it is much dependent also upon opening of what is termed the king's pass, or gap, which at present is, generally speaking, completely stopped by the tail-wall of wears which project beyond it; and although passes may be, as to their width, actually specified by law, if the tail-wall of another wear laps over it, of course it is rendered perfectly useless.

Are there in parts of the Shannon with which you are acquainted many wears, or other obstructions to the free passage of salmon to and from the sea to the upper parts of the river?—The obstructions are very frequent; so frequent that very few fish find their way up to that part of the river upon which I reside.

Do you apprehend that alterations might be made upon those wears, with a view to give effect to the king's pass or gap, without injury to the works deriving water from the river?—I do not conceive that in any case which I have seen it would at all affect those works deriving water from the river.

Do you know at what time the salmon in general spawn in the upper parts of the Shannon?—In the end of October and beginning of November; and I should say, that more damage arises to the fishery from the catching of fish going up to spawn, than even from the destruction of fry.

Should you consider that it would conduce to the prevention of poaching if the fence time during which salmon is not permitted to be sold were rendered one and the same throughout the kingdom, so as to stop at market the sale of salmon procured from all rivers during the same period?—I should think so; I believe, indeed, the variation in different rivers is very trifling as to the time when the salmon are in season.

Can your lordship suggest any thing which you think would be useful in effecting the conviction of offenders?—I would suggest that the form of conviction should be inserted in the Act for regulating the Salmon Fisheries; that the information should not be quashed for informality, provided the offence is merely stated in plain terms; that the form also of the warrant for levying the penalty, and for imprisonment, if good and sufficient bail be not found, should be also inserted. I would suggest that all chiefs and petty constables should be bound to visit mills and wears within their respective districts, at least once a month during spring and autumn, and to enter such visits in their quarterly reports; that if they should observe any informality, they shall be bound to report it to the next magistrate; that constables or peace officers, acting under the magistrate's warrant, should be authorized to pull down those king's gaps, which are not of sufficient width; and that in cases where the tail-walls of wears render the king's gap useless, the occupier shall be fineable for retaining them, after a notice of their illegality shall be served upon him by a magistrate, or proprietor, or occupier of land on the river; and that the form of the notice shall be laid down in the Act.

The Honourable *C. H. Butler Clarke*, a Member of the House, called in; and Examined.

The Hon. C. H. B. Clarke.

DO you reside in the county of Kilkenny?—I do.

Are you acquainted with any of the rivers with respect to salmon fisheries in that county?—I am.

With what river are you acquainted in that county?—The river Nore.

Do you happen to know whether the salmon fishery has increased or decreased of late years in that river?—Decreased considerably.

To what causes are you disposed to ascribe such decrease?—To the salmon having

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having been destroyed by wears upon the river, both in the ascent of the fish, and interrupting the fry in their descent.

Can you specify the position of any of the wears in that river?—The most injurious are those above the tide-water, and above where the river is navigable.

Are those wears constructed for the purpose of water being carried to mills or manufactories, or are they wears constructed for purposes connected with the fisheries?—Both; but I conceive the most injurious are those constructed for catching of fish alone.

Do you apprehend that the parties by whom those wears have been erected had a right so to erect them?—I don't believe they had any grant.

Are you aware of any wear in that river for which there is a grant?—I have heard that Mr. Tighe has a grant of his wear, but his wear is in the tide-water, so that I don't conceive it to be so injurious as the others I mentioned before.

Are you aware of Mr. Tighe having offered to remove his wear, to which he has a right, if persons holding their wears without a right would agree to do the same?—I am, and regret most extremely that they did not comply with so reasonable a request, as I understand now that he will not, upon any terms, take his wear down.

Should you think if all the parties could still agree, so as to have all those wears removed, that the salmon fishery in that river would be greatly improved?—I have no doubt of it: within my memory salmon used to sell in the town of Kilkenny for twopence a pound, and now, I believe, it will be found very difficult to be got for tenpence a pound.

Are there in those wears any facilities to the ascent of the fish in the way of gaps or gullets?—There are certainly, but they are made in parts of the river most difficult for the fish to ascend, and every means is taken to frighten the fish from passing through those gaps, by means of white objects, such as horses heads, of large pieces of lime, or chalk, and also in the shallowest part of the river.

Do the Committee understand correctly, that you say, while there is thus a pretended observance of what the law requires, there are means taken to secure its evasion?—I do. The proprietors of mill wears observe the law more correctly than those of the private wears. In the space of five miles of the river Nore above tide-water, and also above the navigable part of that river, (that is, from the bridge of Thomastown,) there are three wears reaching quite across the river, excepting the gaps; two of these are mill wears, and it is in mill *sluices* that salmon fry are chiefly caught; one is a private wear, for the *sole* purpose of catching salmon, and I believe few escape it: and I believe it is a very rare occurrence for a salmon ever to pass beyond all three of these wears; for that reason, I fancy, at present there are no fry to catch; so that I feel confident, if this system is not put a stop to, that in the course of a few years the resort of salmon to the river Nore will be quite destroyed, for this reason, that salmon are not allowed to deposit their spawn in it.

Mr. *John Carpenter Steavenson*, again called in; and Examined.

Mr. J. C. Steavenson.

HAVE you brought with you the returns which you were directed to furnish during your last examination?—I have not, not having it in my power to render them complete till I return to the country, when I undertake to furnish them in a perfect state to the Committee.

You will observe that the Committee require from you returns of the fish caught in each month during the year to which the returns relate?—Yes, I will prepare such returns.

See Appendix, N° 10, p. 165.

You have stated that the fishing commences in the river Ness in December, and continues gradually increasing till March, when it declines?—I have.

Is that a fact established by your own personal observation and knowledge?—It is established in my mind by my personal knowledge and observation, and by the evidence of persons long acquainted with the river.

Then you consider that the best fishing season, with reference to the Ness, is from the beginning of December till the beginning of March?—The principal fishing season for salmon in the river Ness is during the month of February, or the months of February and March.

Were you called upon to recommend a close time with regard to the river Ness, what months would you specially recommend?—For the interest of the proprietors of the river Ness generally, the close time would commence sufficiently early on the 15th or 20th of September, and it is not necessary that the river should be open for fishing again sooner than the 1st of December.

Mr. J. C. Stevenson.

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Then the close time which you would recommend with reference to that river, is the time comprising the months of September, October and November?—Yes, but only a part of September, and the months of October and November, would be a sufficient close time for the Ness.

Do you consider any extension of the close time as beneficial, or likely to prove beneficial to the river, with reference to the salmon fishery connected with that river?—What I propose would be rather limiting the close time than extending it. I am quite aware that a quantity of fish is lost in the river Ness at the close of the season; they are destroyed afterwards by poachers when they get into a state not fit to be used.

When do they get into that state?—After they have remained a few weeks in the river, towards the commencement of the month of November; when they enter the river they are not in a state to take a fly, the usual mode of killing them practised by poachers.

Do you conceive that the close time you would recommend for the Ness would be equally applicable and beneficial with reference to all the other rivers of which you have spoken?—With reference to all the other rivers I have spoken of, it is not necessary that the law should interfere to limit the close time; the nature of the rivers is such, that they form a close time for themselves; they will not yield sufficient fish to pay the expenses after the time they are now limited to, nor before the month of March.

You have stated the decrease of the fish in the Ness to be produced partly by the Caledonian Canal, and partly by the stake-net fishing at Fortrose; is there any other cause to which you ascribe that decrease?—In addition to that, I am of opinion the Ness is injured by manufactories, particularly that of skins.

You mean tanners?—No, it is the washing of sheep skins, particularly with lime; there is also another evident cause, which is the refuse or rubbish thrown into the Ness by the workmen of the Caledonian Canal.

Can you state the relative proportions in which injury is done by those three circumstances?—It is not in my power to do so.

The stake nets do unquestionably, you admit, occasion a decrease of the fishing in the Ness?—I am not aware of the extent of the injury done by stake nets; I have allowed that there is a possibility they do injure the fishery, but I am of opinion it is to a limited extent.

If there be any injury, how is it occasioned?—The Committee is probably aware, from the evidence before them, such as charts of the Beauly and the Moray Friths, that the fishing at Fortrose is situated in the estuary of the river Beauly and Ness; they are also aware that the salmon going to these rivers must pass the fishing at Fortrose.

What is the distance from Fortrose to the mouth of the Ness, or the Beauly?—The distance, in a direct line, from Fortrose to the river Ness, taken by a quadrant, is, I believe, seven miles; by the coast it is something more.

Are there no fish taken by stake nets in their way to the river?—Many.

What class of fish are they?—Of the same description as those taken in their way to the river by all the other modes of fishing in practice.

Are spent fish never taken in the nets?—A very small proportion in the nets at Fortrose; I don't recollect having heard of more than a score in any one year since I have been acquainted with them.

Can you speak of the other stake nets in the estuary of the Ness and Beauly?—Only generally.

Do you know the stake net near Culloden?—I have some acquaintance with it.

Do you consider that fishery to be injurious to the fishing in the Ness and Beauly?—In some small proportion it may be injurious.

How is that injury produced?—In the same manner as the stake nets before alluded to at Fortrose and Fort George.

By intercepting the fish in their way to the river, and occasionally intercepting the spawned fish on their way to the sea?—I never heard of any quantity of spawned fish having been taken in the nets at Culloden; it is not situated in a manner likely to take a large quantity of returning fish.

Are fry frequently intercepted by stake nets at Fortrose, or any other situations to which you refer?—I never heard of a single fry having been in any one of the stake nets at Fortrose; nor did I ever hear of fry, to any considerable extent, being killed in any of the other stake nets in the friths with which I am acquainted.

Do you think that the stake-net fishing in that frith has generally tended to lower

lower the rental of the Ness fishing?—I don't think it has tended to lower the rental of the Ness fishing to any extent worthy the consideration of the proprietors.

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How has the rent been lowered to one tenth of its original amount?—By a very extraordinary diminution of its produce, by a much more expensive mode of fishing having been imposed on the tenant since the use of cruives was decided to be illegal in that river, which, of itself, must have taken off 400*l.* a year from the value of the rental.

Can you state the amount to which the establishment of stake nets has reduced the rental, since the other cause, you say, has thrown off 400*l.* a year?—I have already answered that question as explicitly as I could have done, by stating the manner and extent to which rivers are injured by stake nets; it is quite impossible to state the exact amount.

Can you state the extent of the injury occasioned by the Caledonian Canal upon the rental or quantity of the fish produced?—It is impossible to specify the exact amount.

Is it considerable?—There are witnesses to be found who will probably state that the injury is very considerable.

Who are those witnesses?—I should think Mr. Fraser, of Lochend, who is tenant of some of the upper fisheries on the Ness.

Does any mode occur to you by which the injury to the Ness, arising from the Caledonian Canal, (be it in amount what it may,) might be obviated without injury to the canal?—There is no mode strikes me which would be an effectual remedy without doing injury to the canal; the only mode would be to keep a very narrow grating across that part of the canal which communicates with Loch Oich. The manner in which the injury is done is this,—the fish generally breed in small rivers communicating with Loch Ness and Loch Oich; (they also, I believe, breed in those lochs,) the communication of Loch Ness, or rather Loch Dochfore, is direct into the Caledonian Canal.

Are those communications which you have mentioned with Loch Oich and Dochfore communications by which vessels pass, or communications merely for the admission of water?—They are communications by which vessels pass.

Then it would be necessary to remove those gratings whenever a vessel was to pass?—It would, of course.

Can you describe the manner in which the injury is done?—The river Ness runs out of Loch Dochfore from one side of the loch; the canal receives its water directly from the end of the loch; the disposition of smelts is to fall into easy water; they naturally are led to the lower end of Loch Dochfore from this disposition; and having passed the entrance into the river Ness fall into the canal, and from the numerous obstacles that the gates of this canal present they don't find their way to the sea in the proper season; there is no doubt that immense quantities of fry are destroyed in the Caledonian Canal, because the gates prevent their getting out at the proper season to the sea.

You stated the exact amount of the diminution by cruive fishing, can you not also state the diminution by the other mode of fishing?—I know the exact diminution caused by doing away the cruives, from the circumstance of knowing the exact increase of expense, which is the only alteration that has been made.

Is stake-net fishing an expensive mode?—In some situations it is a very expensive mode.

In the estuary to which we refer, is it expensive relatively to other modes?—In some situations it is expensive, in others it is not so.

At what season do the fry in the river Ness descend the river?—Much depends upon the state the water is in, but generally it is from the middle of March to the end of April.

Are you acquainted with the mode of cross-fishing with lines and rods joining across the river, and several hooks appended thereto?—I know that such a mode is practised in several north-country rivers, particularly in the Ness.

Do you consider it a very destructive mode of fishing to the salmon?—It is so far a very destructive mode of fishing, the principal part of the fish taken by that mode are foul fish, or spawners.

Is it a mode of fishing practised by proprietors of fishings, or by poachers only?—By poachers only.

Are you aware that the fishery laws at present do not prohibit it?—I am aware that the law prevents every description of poaching, and of course it would prevent that as well as any other.

Mr. George Shepherd.

26 May, 1825.

Mr. *George Shepnera,* called in; and Examined.

WHERE do you reside?—In the city of Cork.

Have you had any opportunities of knowledge respecting the salmon fishery in the river Lee, at Cork?—I have had since I was a child.

Of what part of that river?—From three miles above the city down to the harbour.

Do you mean the harbour of Cove?—Yes; being an extent of twelve miles.

Is the fishery in that extent the property of one person?—It is not.

Are you acquainted with the whole of it, or that which is the property of any particular individual?—The whole of it.

Do you consider that the salmon fishery in those parts of the river Lee to which you advert has increased or decreased of late years?—It has decreased within the last ten years.

To what causes do you attribute that decrease?—In the first place, I attribute it to the destruction of the spawning fish on their way up the river to spawn.

In what way are the spawning fish destroyed?—They first meet with obstructions upon the river at and near the pass to the eastward of the city; there nets are stretched entirely across from side to side, or fixed to a pole or rings made fast in the wall, and one net is never withdrawn till the second is shot out, so as to preclude the possibility of the fish escaping.

During what season are the nets you mention used in the manner you have stated?—Particularly during high flood season, assisted by tides in the months of October and November.

At what season does the fishery commence and cease?—It has been the custom in the city of Cork to fish during the entire year, agreeable to the Acts of Parliament.

At what season do salmon in the river Lee become heavy with spawn?—In the month of October.

At what time do you believe they deposit their spawn?—I know it is in December and January, or if the frost set in earlier it facilitates their spawning.

At what season do fry descend the river Lee?—In the latter end of April; or they may be a little later, if the freshes do not assist them in their movements.

You have stated that it has been the practice in the river at Cork to fish for salmon throughout the year, in what manner, when fishing for fresh fish, do you avoid taking unspawned fish?—There is no practice adopted which could prevent us taking the spawning fish at the same time with the new run fish.

In point of fact, therefore, when the salmon fishery is carried on throughout the year, unspawned fish are taken with the new run fish during the spawning season?—They are.

Is not that practice very destructive to the salmon fishery?—Certainly it is.

When spent salmon are returning from the river, are they ever taken along with the new run fish?—No, not along with the new run fish; but they are taken by a few poachers upon the river, in purse nets, in narrow passes, and mill streams.

In what manner do persons, having a right to fish, avoid taking the spawned fish at that season?—I know of no manner by which they avoid taking them; they take them indiscriminately; there are two channels to the river of Cork; it divides at a certain point, and encircles the city; those fish retreat by one of those channels, which is the southern one, in consequence of the wear, which directs their course to that side; upon this branch little or no new run fish are ever taken.

What is your opinion as to the period that ought to be observed in the river Lee as the fence months, or close time during which salmon ought not by law to be permitted to be taken?—The river is an unusually early river; and I conceive that during the months of October and November the fish are too heavy to be taken, and it would be for the interest of all proprietors to have the fish go up to spawn during those two months; but in December the new fish run, and continue during January, February,—and in March they decline; the fishing season then ceases, with the exception of a few peel, which are called grilse in other rivers, and again commences in the month of September, when the primest and best description of fish are taken; those are the returned fish of the former January and February, which retreated to the sea, at the weight of 8 lbs. or 10 lbs. and return in the month of September, from 24 lbs. to 30 lbs. and sometimes even 34 lbs.

You

Mr. George Shepherd. 26 May, 1825.

You before stated, that along with the clean run fish, the unspawned fish are indiscriminately taken; do you mean to say that there are no unspawned fish at the time that the clean fish begin to run?—By no means; there are unspawned at that time mixed with the new run fish.

Then how do you come to recommend that the fishing season should commence at the time when there are unspawned fish mixed with the new run fish?—Because the number of new run fish in the month of December oustrip those of the spawning fish; they are more numerous, particularly if it should be a wet season.

Are clean fish allowed to ascend to the upper parts of the river, so that the persons in whose properties the fish spawn may take fish in good season?—They cannot be prevented from so ascending; the freshes are so constant in the months of December, January, and February, that the wear and fisheries overflow, and no obstructions can be placed at that season of the year.

Have you not stated that nets are stretched across the river which prevent the fish ascending?—That is below the city.

But if there are nets stretched across the river, below the city, so as to prevent the fish ascending, are they not obstructions to the ascent of the fish to the upper parts of the river?—Certainly, the only ones to be found at that time; the fishery wear is above the city, and those obstructions are below.

In point of fact, the upper proprietors upon the river Lee take salmon in those upper parts of the river?—They do; all who can catch them take them at that time when they are in season.

Is the proportion of fresh run salmon which ascend to the upper parts of that river, considerable?—Very inconsiderable.

Do you wish to make any observation with reference to any remedial measure connected with the salmon fisheries at Cork?—I do.

Be so good as state what you would propose?—The prevention of the destruction of fry upon the river, in the first instance, in immense quantities, particularly at the Government establishment of the powder mills at Ballincollig, four miles and a half to the west of the city, where they are taken in the mill dams; several hogsheads are taken in one day.

In what way would you suggest that this practice might be prevented?—I conceive that the existing laws, if put in force, are ample for that means. Within four weeks I myself instituted a prosecution against a respectable gentleman, upon the river Lee, Mr. William Dunscombe, who declared that he was not then aware of the existing law against the destruction of fry, but that if I would forego the prosecution he would bind himself that neither he, his tenants, nor any person upon his ground, should ever again fish with the net till the 1st of June, beyond what the law prescribed. I traced those fry to the markets of Cork, where they had been sold for three halfpence per dozen. I went the following morning with four men, at three o'clock, and found Mr. Dunscombe's people about to fish at five; I caught them in the act, and took the necessary measures for carrying on a prosecution against them.

You stated that you think the existing law sufficient; if so, what is the difficulty as to its being enforced?—I know none but the apathy of those concerned, or who ought to be interested in it.

Has not a penalty been, in many cases, enforced, upon information being lodged before a magistrate?—I was the first person who did so for the last fifteen years; I never heard of its being done before in Cork.

Are those wears considered legal where you represent them to be near Cork?—They are; there have been much greater facilities afforded for the fish going up to spawn at those wears within the last ten years; they having been lowered eighteen inches in consequence of legal proceedings being instituted against them.

The property is acknowledged by the public?—Yes, it is a chartered and fee-simple estate; I can produce documents to show the real value for the last four years.

Can you furnish any account of the produce of the river Lee fishery during the last four or five years?—I can.

[*The witness here produced the following Statement*]

ACCOUNT of Fish taken in the River Lee Fishery, from 15th Sept. to 31st February inclusive, in the Years 1821, 1822, 1823, and 1824.

Years.	Sept. 15 to 31.	October.	November.	December.	January.	February.	Total.
	£. s. d.	£. s. d.	£. s. d.	£. s. d.	£. s. d.	£. s. d.	£. s. d.
1821 - - -	15 6 6	69 - -	102 - -	70 10 -	167 5 -	122 16 8	546 18 2
1822 - - -	7 11 6	116 15 -	104 - -	74 10 -	40 5 -	51 - -	394 1 6
1823 - - -	34 3 6	129 2 -	47 19 -	318 9 6	56 11 -	49 2 6	635 7 6
1824 - - -	10 8 3	154 6 -	140 16 6	120 1 6	111 5 -	55 16 6	592 13 9
£.	67 9 9	469 3 -	394 15 6	583 11 -	375 6 -	278 15 8	2,169 - 11

Produce of four years for the above period, £. 2,169. 0 *s.* 11 *d.*; being, on an average, a loss of £. 542. 5 *s.* per annum.

ACCOUNT of Fish taken in the River Lee Fishery, from 31st February to 16th September inclusive, in the Years 1821, 1822, 1823, and 1824.

Years.	March.	April.	May.	June.	July.	August.	To Sept. 16.	Total.
	£. s. d.	£. s. d.	£. s. d.	£. s. d.	£. s. d.	£. s. d.	£. s. d.	£. s. d.
1821 - - -	220 7 6	64 19 -	40 9 6	35 18 -	8 6 8	7 14 -	15 6 6	393 1 2
1822 - -	61 5 -	29 - -	24 16 -	5 13 -	26 5 -	9 6 -	7 11 6	163 16 6
1823 - - -	50 14 6	39 6 6	82 2 -	50 16 -	35 9 -	43 11 -	34 3 6	336 2 6
1824 - - -	29 13 -	24 19 6	32 11 -	52 10 -	51 1 -	5 7 6	10 8 3	206 10 6
£.	362 - -	158 5 -	179 18 6	144 17 -	121 1 8	65 18 6	67 9 9	1,099 10 8

Produce of the above period, being unrestricted - - - £. 1,099 10 8

Average of four years for the above period per annum - - £. 274 17 8

Three fourteenths of which is £. 58 *s.* 18 *s.*; being a loss by the restriction from fishing, from Saturday evening at sun-set, to sun-rise on Monday morning.

Proposed restriction from 15th September to 1st March, if carried into effect, will leave a loss per annum of - - - - £. 542 5 -

Ditto, from Saturday evening at sun-set, to sun-rise on Monday morning - - - - - - - - - - - 58 18 -

Total loss - - - £. 601 3 -

Martis, 31° die Maii, 1825.

THOMAS FRANCIS KENNEDY, ESQUIRE,

IN THE CHAIR.

The Right Hon. Sir *George Henry Rose*, Member of the Committee; Examined.

Right hon. Sir George Rose.

31 May, 1825.

HAVE you any statement to make respecting the wears on the river Avon, in Hampshire?—I beg to deliver in the following paper, which contains all I think it necessary to state upon the subject.

"With respect to certain wears in the Hampshire river Avon, a report of the conservators made in 1798, the year after the last Act affecting that river was past, states as follows:

"The conservators assigned for the preservation of the fish within the said river, solicitous to discharge the trust reposed in them to the satisfaction of the proprietors of the fisheries, conceive it their duty to lay before them the state of the said river, and such observations, as well as the obstructions and engines which tend to the certain destruction of the fisheries as did occur to them on their several surveys, and which, when removed, they humbly conceive, may tend greatly to the increase and preservation of the salmon and other fish.

"They therefore state, that on their first survey they began at Knap Mill. Upon their first examination of the wears, no scuttle, or hatch of one foot square, in any part of the wears, was or ever had been kept open in the direct stream in the memory of man, agreeably to the Acts of Parliament in the reigns of Geo. 1. and Geo. 3.

"That from evidence they learned that a private agreement between certain persons interested in the fisheries, existed, which set forth that three hatches in the eastern part of the wear, upon the direct stream, should be kept open from Saturday at four o'clock P. M. to Sunday at four P. M. from the first Saturday in Lent to the 12th September.

"It did not appear that there was any other opening in the said wears sufficient for the salmon to pass and repass freely, except this.

"From thence they proceeded to Winkton Mill. It was reported to them that there had been formerly a rolling bay; but now a set of hatches is fixed in the place of it, which diverts the great body of the water from its old course, for the purpose of working the mill.

"Its former channel is almost dry in the summer, and there is no opening sufficient for the salmon to pass and repass. It is reported that a similar agreement between persons interested in the fishing, of keeping open a run for the same space of time as at Knap Mill, now exists.

"At Avon Mill there appear to be the same obstructions, equally prejudicial to the salmon fishery. The main stream is diverted from its ancient channel; the great force of water is carried to the mill for the purpose of a manufacture there established; and no hatch or scuttle ever kept open.

"The conservators are sorry to relate, that after their first survey they were under the necessity of laying an information against the owners and occupiers of the several mills; viz. Knap Mill, Winkton Mill, and Avon Mill, for not keeping open a hatch or scuttle, of a foot square, in the waste hatch in the direct stream, agreeably to the Acts of Parliament, notwithstanding public notice had been given for the purpose.

"The information was heard, the conviction was made, and the fines paid.

"Upon a succeeding survey at Knap Mill, there was found open a scuttle or hatch, of a foot square, which was placed in the wear adjoining the said mill. They think it necessary here to observe, that the hatch or scuttle so placed is not in the direct stream, and being so placed, can be of little or no service, because the salmon and other fish, are generally found in the old channel; and I apprehend that this report as to the facts regarding Knap Mill, is correct. The free course of water to be given during certain times, from the three eastern hatches of the upper wear, appears to rest on no statute, but to have the force of law by prescription. It should be observed, to render what is said intelligible as to this run, and that of the foot-square scuttle required by the 4th Anne, that the river divides itself into two branches above Knap Mill, and that the great or upper wear, of fifteen hatches, is

Right hon. Sir G. H. Rose.

31 May, 1825.

on the main, or old channel, and the small or lower wear, of ten hatches, at the mill in the side stream.

"In 1799 Sir James Mansfield gave an opinion, evidently to some owner or owners of upper fisheries, in which he states, that 'it does not appear to him that the owner of the fishery is within the provisions of the statute of Queen Anne;' and this explains why the conservators did not follow up their report, and attempt to compel the owner of the fishery, now mine, to open the foot-square scuttle at the upper wear, instead of that given at the lower wear; but when it was represented to me that it was important to the upper fisheries that I should so transfer this scuttle, I did so, though I conceive myself to be out of the scope of the law. This was done in January 1824, and has remained so; since then I have learned, that a supposition that the foot-square scuttle was first given in the upper wear, and then transferred to the lower wear, is unfounded.

"The 4th Queen Anne, c. 21, and the 37th Geo. 3, c. 95, require that the foot-square scuttle shall be given from the 11th November to the 11th July following.

"Having been informed, for the first time in the course of the last month, that a belief exists that the twenty-four hours run has not been always duly given, I inquired instantly by letters, and as soon as possible in person, into this matter. The head fisherman assures me, that both the foot-square run first at the lower and now at the upper wear, and the twenty-four hours run have been invariably given according to law. On the other hand, a most respectable gentleman, who visited the wears two or three years ago, found neither of them given, but he thinks he has not been able to ascertain whether his visit was made at a time in which the law required these runs to be given. I am compelled, therefore, to make this statement, without the benefit of more certain information from him. On a recent visit made by him to the wears, and on one made by a gentleman whom I requested to observe the conduct of the fishermen, the foot-square scuttle was found duly placed and open; all the hatches and racks were found up for the twenty-four hours run; and the head fisherman explained to me his reason for giving this full run, instead of the legal limited one, and which, he says, he has done for some years back, as derived from a circumstance which he stated, and which led him to believe that the sooner the river was brought to a level, the fewer fish went up.

Mercurii, 1° *die Junii*, 1825.

THOMAS FRANCIS KENNEDY, ESQUIRE,

IN THE CHAIR.

George Leach, Esq. called in; and Examined.

George Leach, Esq.

1 June, 1825.

ARE you acquainted with the fishery in the river Camel, in Cornwall?—Yes.

Do you know at what time the fishery usually commences in that river?—For salmon-trout and salmon-peal, as we call them, about July, I think, and they last during the summer.

To what time?—To September and October, I believe.

Do you know what is the present close time fixed by the sessions for that river?—I do not.

Do you know whether the fish are in that river, or in the estuary of the river, at any other time than that you have mentioned?—I conceive the salmon-trout come into the river in July, it depends upon the floods; if there are heavy rains they go up into fresh water earlier than they would perhaps, three weeks or a month; that is the case in all our small rivers when the water is very low; they remain about the mouth of it; when the floods come they go up.

In what state are the fish found in that river in the months of October and November?—The salmon are considered in high season in the months of October and November.

Is not that the time in which they are universally esteemed to be the best?—Yes; the salmon are not caught in that river, they do not go into the fresh water at all until early in October.

Do you know at what time the salmon begin to be out of season?—I cannot say with certainty, but I should think after Christmas.

From

George Leach, Esq.

1 June, 1825.

From March to September there is no fishing whatever in that river?—No salmon fishing.

Is there salmon-trout fishing at that time?—Yes, in the summer months.

Will you state at what time the salmon-trout are supposed to be in season?—They are in season in July and August.

Those are the best months?—Yes, I believe they are the best months; I should say that my evidence upon those points is not the best that can be had, but I think I am pretty correct in what I state.

What do you think, from your knowledge of that river, would be the effect of a close time from the beginning of September to the middle of March?—We should get no salmon, certainly.

To whom does that fishery belong?—It belongs to the Molesworth family and the Vivian family jointly.

It is let by them at a rent to tenants?—Yes, it is, worth very little, certainly; it is not a valuable salmon fishery.

Can you state the number of salmon taken there?—I cannot.

Do you know any thing of the fishery in the Fowey?—No, I do not.

What opportunities of knowledge have you respecting the river Camel?—I am the agent for the Molesworth family; I know the man who has the fishery particularly well, and am frequently in the neighbourhood.

Can you state any thing respecting the annual value or produce of the salmon fishery in the river Camel?—If I were to fix the value of it at 50*l.* a year, I think it would be the full amount.

Do you mean that that is the value of the whole of the fisheries in the river, including the different proprietors of both the salmon fishery and the trout fishery?—I know nothing of any fishery higher up, but there are many proprietors who have rights of fishing; many fish pass up that are taken higher up; there is no wear to keep them back.

Do you mean the sum of 50*l.* to apply to all fisheries below the points, and including the fisheries with which you are acquainted?—Yes.

Including salmon and trout?—Yes; salmon and salmon-trout.

Have you any occasion to know whether any of the fisheries higher up are let for a valuable consideration?—No, I have not.

You have stated that the fishery does not commence till the month of October for salmon?—Yes.

Have you any knowledge of the season at which salmon spawn in the river Camel?—No, I do not know when they spawn; I cannot say with certainty.

Do you know at what season the salmon fry descend the river Camel?—Yes, they go down about April.

Have you any reason to think that the salmon in the river Camel spawn at a different season from the salmon in other rivers, in which the fry go down at the same period?—No, I have no reason to suppose so.

Do you know any other rivers?—Yes, I know the Tamar, in Devonshire, and the Taw, and the Plym, and a variety of rivers.

In those other rivers you have mentioned do the salmon fry go down in the month of April?—Yes, in all of them.

Have you any means of knowing at what season the salmon spawn in those rivers?—No, I have not.

In talking of salmon being in season in the river Camel, what do you mean by that expression?—Fit for the table, very red, and the flesh fine and fit for eating.

Do you know whether there is any roe in the salmon taken in the month of October in the river Camel?—I cannot say that with any certainty. I have eaten them many times, but I cannot state that from my recollection.

Do you consider the salmon to be in season when they quit the sea, whether there be roe in them or not?—Yes, I have always considered it so.

Is there any circumstance connected with the river Camel which you think can at all interfere with the salmon ascending that river at an earlier period than October, the quantity of water, or the condition of the river in any respect?—The tide flows, I think, about ten miles above the town of Padstow; it flows over a sandy beach; in the fresh-water part I see no reason why they should not go up that river as well as others of the same size, which I know they do ascend.

In the part of the river which lies above the tideway, is there, in the months of

George Leach, Esq.

1 June, 1825.

June, July and August, water sufficient to carry up salmon into the upper parts of the river?—Certainly; above the tide.

Is there any salmon fishery practised in the tideway of the river Camel?—Yes.

There are no salmon taken in the tideway of the Camel before the month of October?—I believe not.

What is the mode of fishing practised in that river?—They are taken by nets.

Of what description?—I cannot say with any certainty, I never saw them taken.

Is there any machinery, or are the nets used, and carried off when they cease to be used?—The nets are carried off, I believe.

There is no fixed machinery?—No.

Does the tide, either in the estuary, or in the river, recede any considerable distance between high and low-water mark?—Yes.

How far should you think?—It leaves a very narrow stream in the middle, the entire width from bank to bank being about half a mile.

You are of opinion that salmon are not taken in that river before October?—Certainly.

John Hearle Tremayne, Esq. a Member of the Committee, Examined.

J. H. Tremayne, Esq.

CAN you state what are the fence months established by the sessions for the rivers in the county of Cornwall?—I will beg, in answer to the question, to deliver in an extract from the books of the sessions.

[*The same was delivered in and read as follows:*]

Fence Days appointed by the Justices in Quarter Sessions, in Cornwall, for the Preservation of Salmon in the Rivers of that County.

River Fowey:—From the 15th of December to the 1st of May, both inclusive.

River Camel:—From the 23d of December to the 15th of May, both inclusive.

River Tamar:—From the 1st of November to the 27th of April, both inclusive.

Thomas Spring Rice, Esq. a Member of the Committee, Examined.

T. Spring Rice, Esq.

CAN you afford any information to the Committee respecting the general state of salmon fisheries in Ireland?—The information that I am possessed of applies itself exclusively to the south of Ireland; with the state of the salmon fishery in the Shannon, more particularly in the lower Shannon, I am well acquainted, residing on the banks of the river, and my father being a proprietor, and interested in the fishery of the stream; I know something also of the state of the salmon fishery in the neighbouring counties of Kerry and of Clare.

Do you consider that the salmon fisheries generally in those rivers with which you are acquainted have decreased or increased?—Applying my answer to a period of about fifteen years back, during those fifteen years, I believe there has been an increase up to a particular time; since which there has been a decrease, the causes of the increase and decrease I think it is in my power to explain to the Committee.

Have the goodness to state what you consider to have been the causes of the increase up to the period which you have in view, and of the decrease since that period?—About the commencement of the period to which I refer the great salmon fishery of Limerick, which is one of the most important in Ireland, and has been so, I may say historically, being made the matter of grants from the Crown during the reigns of the Stewarts, was, I believe, prosperous. This fishery was granted to the Corporation of the city of Limerick, and I believe was by them let to certain individuals, who managed it, I believe, to their own profit, and to the profit of the public also. The mode of fishing is by a wear which extends very nearly across the river; but the individuals possessed of this property were bound to leave open certain passages in that wear, in order to admit of the passage of the fish, otherwise the stream would have been entirely interrupted by the wear which crossed it; but the parties interested endeavoured to stop up those passages, with a view to their own increased emolument and advantage; this excited a great deal of adverse feeling in the country, it being considered both unjust and illegal. It led

led to discussions in courts of law, a vast deal of money was expended, and the matter must have ceased to be so profitable to those who were concerned in it; they were at length compelled to open the wear in the manner directed by law; but in consequence of the proceedings to which I have alluded much money was expended, the fishery was not re-let to advantage, and that fishery has ceased to be as profitable a one as formerly. In the mean while a new mode of fishing was introduced in the lower Shannon from Scotland; some persons of the name of Halliday, who are probably known to the Committee, introduced the stake-net principle of fishery; it was adopted with very great success. The increased supply of salmon which took place by the introduction of the stake-net fishery, was, I believe, infinitely greater than any deficiency of supply produced by the alteration of the fishing in the river above. After a certain time proceedings were taken against the stake-net fishing, and that now almost ceased to exist in the lower waters of the Shannon; so that the present state of the fishery is, that the stake-net fishing in the lower Shannon has ceased to be productive, and the stream fishery in the upper Shannon has ceased to be productive also; and we have now infinitely less fish than I remember in former times. The answer I have given has referred the diminution of fishing solely to the mode of fishing; another cause of diminution has been the poaching in the river.

T. Spring Rice, Esq.

1 June, 1825.

What is your impression with regard to the effect of the stake-net mode of fishing which did exist, but which has been discontinued in the lower part of the Shannon, with reference to the supply which might be obtained by that system of fishing being permanent, or as having any effect in diminishing the supply of salmon?—My own impression certainly would be, that if the stake-net fishing were conducted on proper principles, and limited within the proper periods of the year, the supply of fish in the upper Shannon would not be diminished by the stake-net fishing below, the part of the river in which the stake-net fishing has been introduced is upon an average from one mile and a half to two miles wide, it is sufficiently deep to float a man of war, or an East Indiaman; it is distant about twenty miles from the great fishery upon the upper Shannon; the stake-net wears which have been introduced do not project, I conceive, on an average, above a hundred yards into the tideway from high-water mark; and at the commencement of the introduction of the stake-net fishing, and subsequent to the time in which it was most productive, I do not conceive that there was any consequent reduction in the fishing in the upper Shannon, and therefore I cannot myself imagine that the stake-net fishing below produced any material effect upon the fishing in the river above, the diminution in the fishing above took place, as I conceive, from other causes; but having been nearly contemporaneous with the stake-net fishing below, a general impression went abroad that the reduction of fishing in the upper water was connected with the stake-net fishing in the lower.

Can you state what other causes were in operation to diminish the salmon fishery, and which you have stated to be contemporaneous with the use of stake nets?—The upper fishery got into a state of confusion by litigation and the improper conduct of persons concerned with its management; and it was from that, and from the want of a strong direct interest connected with the property, managed, I believe, by a company, and not by individuals; it is to those circumstances that I impute a diminution of the fishery above, always wishing it to be understood that there was also a great deal of loss from poaching and improper practices.

Do you conceive that the breeding of salmon, in the upper part of the Shannon and its tributary streams is at all protected, so as to render it likely that the salmon fishery can exist in a prosperous state?—I conceive that the spawning fish and fry in the upper Shannon are wholly without adequate protection. The river is a very great one, as the Committee are aware; the shores are the property of a vast number of individuals, and there is no mode of combined action that will enable them to protect the fish: an illustration of this will at once be found, if we compare the state of the fisheries in rivers which flow through the estates of one single proprietor, with the state of a fishery like the Shannon, which flows through the estates of many, through many counties; in the one case, where the individual who has an interest has also the power of protecting the fisheries, we find the fishery prospers. I would instance, as a case of successful fishery, in the county of Kerry and barony of Iviregh, the property of Mr. Butler: there, I believe, the river flows exclusively through his own estate; he supplies his own protection, and the salmon fishery is

 prosperous;

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prosperous; whereas in a great river, like the Shannon, the counties, as such, have no power of interfering with effect; the individual proprietors of estates are too numerous to combine, and the result is there is no protection at all.

Should you think it desirable that the law should afford the means of united action on the parts of all persons having an interest in such a river as the Shannon?—I have no doubt that without some alteration of the law, that may enable all parties interested to combine, and to provide funds fairly proportioned to the interest each has in the protection of the river, without some such alteration of the law there can be no adequate protection to the breeding of fish in the upper waters.

Have you any reason to know what the proper season for fishing is in the Shannon in reference to the season at which the salmon breed?—I have no sufficient information to enable me to answer that point; but I believe a gentleman who has been examined upon this, Mr. Fisher, is a competent authority on the subject.

Should you think that it would tend to the protection of rivers from poaching or fishing at improper seasons, if it were found possible to make one uniform fishing season, so that the sale of salmon, at any but that season, would be illegal?—I have no doubt, with reference to the south of Ireland, that it is very essential that one general system should be adopted for the whole, even though, from local circumstances, it is found necessary to adopt a system which may be rather formed upon a compromise and an average, than to expose ourselves to the difficulty which a varying system, varying according to locality, would superinduce; because if there is a varying system in every river or every district, this will produce an uncertainty in the execution of the law, and in the administration of it, that will lead to the utter neglect of the provisions of the law altogether. I speak with regard to Ireland; and as a person feeling some interest in fisheries, I should much rather submit to a small inconvenience with regard to the time, and sacrifice what I might be inclined to consider the strict necessity of the case, than obtain that which might be felt to be locally and absolutely right, exposing the public to the inconvenience of having a varying system in other parts of the country.

Is it your opinion that if a general law, such as that you point at, were enacted, and that law were found to be effectual in the protection of fisheries, the fisheries of the Shannon might become again productive, and rise to a very great value?—I have no kind of doubt, that if means were taken for the adequate protection of the fisheries of the Shannon, they would not only become a matter of very considerable local importance, but might also reach some degree of national importance; the local importance of this produce is apparent, when it is considered the effect which a cheap supply of fish produces on a potato-fed population, and that population of the Roman Catholic religion; there are few measures that would be more important to the comfort of the people than giving them an adequate home supply of fish. And looking back to the increase of fish which took place upon the introduction of stake nets in the lower waters of the Shannon, I have no kind of doubt, that were the fisheries of the river properly managed we should see a prodigious increase of the production of fish in the market to any we have seen in past times.

Do you apprehend that in that part of the Shannon, where it assumes the character almost of an estuary, where it is large and deep, there are many modes of fishery which might be practised with success?—I can only speak from the result of two experiments which have been tried, one was an experiment tried by a gentleman connected with the counties of Somerset or Devon, who introduced what was called the Ramshead wear some years ago; the other was the experiment of Mr. Halliday, who introduced the Scotch stake-net fishery, both those experiments led to an abundant supply of fish; and I can have very little doubt, if an experiment with adequate capital, and founded on adequate information, were to be tried, the supply of fish could be carried much farther than it now is.

Do you apprehend that fishing by means of draught nets, or seines, is applicable to that part of the river to which you have now adverted?—There are great bays in those parts of the river to which I allude, and very shoal water there. Seine fishery, not for the purpose of salmon fishery, but for other fishing, has been introduced with effect; but the deep-sea fishing, by means of nets, has never been tried to my knowledge; we have never tried any experiments upon the subject, and I am not competent to say how far those experiments might be tried successfully.

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Can you state the circumstances under which the stake-net mode of fishing has been discontinued?—When I used the word discontinued, I did not mean to say it had entirely ceased, because it still exists, but exists under circumstances which prevent its being as productive as it otherwise would be if carried on in a satisfactory manner. In the year 1810 or 1811 the stake-net fishing was introduced in the Shannon by Mr. Halliday, we had never heard of such a thing before; I do not believe it had ever been known in Ireland: that mode of fishing continued for some years without interruption, and with very great success, so that I myself have seen in one of the stake-net wears, in a single tide, 280 very fine salmon taken. About this time the persons interested in the upper waters of the Shannon, feeling the effects in the market of a great additional supply of fish brought in competition to their own, which consequently lowered the price of fish, considered whether it was possible to put down the stake-net mode of fishing; they also apprehended, though I think erroneously, that the taking of fish below diminished the quantity of fish above. Upon taking opinions, they found there was an old statute of Charles the first against illegal modes of fishing, and that this statute, after reciting, "that many of the king's subjects, by reason of their ungovernable appetites and inordinate desires, had destroyed the breed of fish by still nets, stake nets, and standing nets," the statute proceeded to enact that those modes of fishing, and others which are recited, should be discontinued under penalty. Now as the proprietors of the upper fishery found that the word "*standing net*" was used in that Act, and that the stake-net fishing was in fact a fishing by a net that was standing, they conceived it was prohibited under the statute of Charles the first, although, as I have stated to the Committee, it was a new mode of fishing never known in Ireland before, and therefore as the persons concerned in the fisheries below imagined, could not have been within the contemplation of the statute of Charles the first; the lessees of the tolls accordingly took legal proceedings against Mr. Halliday, who was the lessee of those wears; a trial came on, and the decision of the court of Nisi Prius was that this mode of fishing was prohibited by the statute of Charles. There was an application made, I believe, for a new trial, and the court above affirmed the decision of the judge at Nisi Prius, and as far as that decision went the Committee have the judgment of an Irish court of law; but it was the court of Common Pleas, Lord Norbury being the presiding judge on the occasion, that decided that stake-net fishing is illegal. In consequence of this decision Mr. Halliday abandoned the fishery; but the peasantry of the country having once seen how the fish could be taken, and having felt that it was for their own advantage and interest to take it, instantly set up wears of their own; the individual proprietors would not do so, because, under the precedent in the case against Mr. Halliday, they might have been liable to be proceeded against; but persons holding leases under them, generally speaking poor people, put up the stake nets along the shores, and the lessees of the wear above, and the persons interested in the upper Shannon, did not find it worth while to proceed against men who were not worth very much, and when the result of the action would have been only to encumber them with the costs of suit. Thus things stood until about last year, when an individual applied to the police in Limerick, and without the privity or approbation of the officer commanding the police (the constabulary force of the country), but under the warrant of some of the chartered magistracy of the city of Limerick, took out an armed force before day, and they went down the lower Shannon, and indiscriminately, upon the Clare and the Limerick side, cut away all the nets of all the parties, and destroyed their property. This operation continued for several hours; but as soon as it became broad day, and the inhabitants of the country saw people acting as they conceived without sufficient authority, injuring their property and cutting away their nets, they all turned out for the purpose of resisting them: there was a yeomanry corps at Tarbert, which I believe took its position above one of the stake nets, and the very moment the boats with the police approached they were met by the pointed muzzles of the yeomanry corps. The matter produced a great sensation in the country; the conduct of the police was thought a very novel and irregular mode of ascertaining that which was a civil right, but it led to the discontinuance of the fishery, in parts of the river Shannon, for a certain time.

You have stated that during the increased supply of salmon which was produced from the stake nets, the proprietors of the waters of the upper Shannon obtained a lower price for the produce of their fisheries?—Yes, I have no doubt of it.

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Was there at that time any practice of sending salmon to a distance, or was the whole produce of the river consumed in its immediate neighbourhood?—By no means; there was an extended market produced. Limerick salmon is of considerable reputation, and extends itself to Dublin, and even to London, but in the latter case, more as a matter of curiosity than of profit; but at the time that it was under the management of Mr. Halliday, which was the only time in which it was carried on on true commercial principles, I know it was his intention to have made arrangements for a much more general and extended supply of the British market, and I have no doubt he would have succeeded.

Do you mean by ice?—Yes, in some cases; particularly so, I believe, from Kerry.

Do you think, if the produce of the salmon fisheries were greatly increased, that a great permanent reduction of price, compared with the previously existing price, would be the consequence?—I should think, from analogy, the increase of the production would in the first place produce a fall in the price, and after a more extended taste had been produced for the article; then, perhaps, the price might again rise, but it is clear that such a result must be equally beneficial to the consumer and to the producer.

Do you consider that the state of the law, as affecting stake nets in Ireland, is settled?—As I have already stated, there is a decision of the court of Common Pleas upon the subject, but I know that the gravest doubts are entertained with regard to the weight of that decision; but passing by that decision, there is an important question for the Legislature to consider, whether, assuming the ancient statute to which I have referred to contain a prohibition of the mode of stake-net fishing, such a prohibition is one which it is for the interest of the State to continue. I myself feel extremely anxious, as being in some degree interested in the fisheries, that unless the mode of fishing which has been introduced from Scotland be one which tends to diminish in quantity the fish available for the purposes of human food, we should not be impeded in that natural and legitimate use of our property, by reason of an ancient and almost an obsolete statute; and I am sure that the individuals who are concerned in the fisheries below would be perfectly reconciled to abandon, both in their own person and in the persons of their tenants, any right of fishing whatsoever, if it was found really to diminish the quantity of fish available for the purposes of human sustenance. But if, on the other hand, putting down the stake-net fishing only diminishes the quantity which is brought into the market to the advantage of the persons who are interested above, and who thereby would obtain a monopoly, such a result would be injurious to the public as well as injurious to the individual proprietors, and that is the point we are most anxious to have settled.

Do you consider it, from those considerations, desirable that the Legislature should interfere with reference to this question?—I conceive it highly essential that it should, particularly with reference to Ireland, where the inhabitants occupying the banks of navigable rivers feel that they have the means of obtaining a supply of food, and a mode of earning their livelihood placed within their reach; and that they are prohibited from availing themselves of those natural advantages merely by an antiquated statute, the bearing of which upon other interests is very doubtful. I cannot conceive any thing which can be productive of greater dissatisfaction; the Committee will observe there is no right of property whatsoever involved in the question, it is merely a question of legislative enactment, and therefore the rights of property, or the rights of fishery, are not at all concerned in the consideration of the propriety of the continuing the statute of Charles.

To what statute of Charles the first do you refer as that under which the stake nets were discontinued?—The 10th of Charles the first, chapter 14; which being an Act against the killing of young spawn, and the fry of eels and salmon, we have considered it a peculiar hardship to apply it to a mode of fishing which could not by possibility, either in theory or in practice, kill the spawn either of salmon or of eels.

Have you occasion to know whether in the stake nets which at one time existed the fry of salmon were ever found?—I made very minute inquiries into that fact, and the result of those inquiries has been a perfect conviction that no fry of fish was ever destroyed by the stake nets in question. I myself have seen the mode of fishing; I never saw any fry so destroyed, and I do not conceive that it

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was likely to take place; but I know that great irregularities prevailed as to the time of fishing; the close time was not, I believe, observed. In reference to those very standing nets, and if they be legalized, should any enactment be necessary for legalizing them, I think it would be very expedient to provide strict remedies against continuing that mode of fishing during the prohibited time of the year.

Do you consider that there are any regulations which you would recommend with reference to stake nets, if they were again to be established under the sanction of law?—I conceive that it would be both desirable, as I have already stated, to fix close time with reference to stake nets, as also to provide, that at certain times, to be ascertained and regulated by the Legislature, an uninterrupted run of the fish should take place; of course it would be but just that such provision should be made applicable to all the modes of fishery; and that if it was made applicable to modes of fishery in the upper parts of the river, it should be extended also to the lower waters. It may be right to mention, that in the part of the river where the stake-net fishery has taken place, the number of porpoises is quite enormous; there are also seals; and, in the construction that has been put upon the law, a general impression has gone abroad, not that we allow the fish to go to the upper waters to be taken for the purposes of human food, but that we rather leave the fish to be consumed by their natural enemies, the seals and porpoises.

When you state that you think a free run of fish should be given periodically, as well with reference to stake nets as other modes of fishery, do you mean that the chambers of stake nets ought to be shut during a regulated period, so that they should not be able to catch fish, and to prevent their ascending to the upper parts of the river?—Unquestionably; for if a course was taken which rendered it necessary to remove the stakes altogether, or even to remove the nets from those stakes once a week, I conceive that would amount almost to a prohibition of the mode of fishing.

Do you conceive that it would be any hardship that the proprietor of a stake net should be obliged to shut his stake net at a fixed hour on Saturday evening, and not to open it again till Monday morning?—None whatever; on the contrary, I think it would be desirable on many grounds.

Do you consider that the stake net standing, but with its chamber shut, would present a material obstruction to the free passage of the fish?—That question involves more knowledge of the habits of fish than I possess, it being a matter in dispute with us, whether, in point of fact, the whole communication of the fish with the upper waters does not take place by the water close to the shore; if that supposition be the case, then certainly the projection into the river of the stake nets, even though the chambers were closed, would present some obstruction to the running of the fish, though, in my mind, a very unimportant one; but I never have yet been able to convince myself that that suggestion was true, and that, in a river like the Shannon, of two miles in breadth, we have reason to believe that the running of the fish is confined exclusively to the interval of a hundred or a hundred and fifty yards along each of the banks.

Have you reason to know whether the porpoises appear on the sides or in the mid-channel of the river?—I have often observed, for many years, a scene of chase of the salmon and the porpoise going on under the windows of my father's residence; and almost every case I have seen that chace take place in the tideway, very nearly in the centre of the river, quite as much in the centre of the river as adjacent to either of the shores.

Should you not consider it indispensable that, if stake nets were recognized, the stakes, nets, and whole apparatus should be entirely removed during the period fixed by the Legislature, as fence months or close time?—Unquestionably; and with reference to any provision which can be made by law against poaching by means of stake nets, the Committee will perceive, that the site of the stake net being notorious, and the mode of fishing being open, there is less possibility of a violation of the law in that mode of fishing than in any other; the result of the establishment of a stake-net fishery would be, in my mind, an effectual means of preventing poaching of another description, because the stake-net fisherman cannot poach without detection, and he acquires a direct interest in preventing other persons from poaching, who might otherwise poach without the possibility of detection, so that the establishment of a stake-net fishery operates, in a degree, the same as a police, to prevent other persons poaching.

Supposing stake nets to be recognized, do you consider it essential that a limit

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should be fixed, beyond which they should not project into the channel of the river, both with regard to an undue interference with the run of fish, and with reference to the navigation of the river?—If it were possible to devise any scale by which you could measure the usual and necessary projection of the stake nets, I should think such an enactment would be very advisable; but the Committee will perceive that the question will vary infinitely, because the necessity of a long stake net is greater where the shore is very shallow, and a shorter stake net where the shore is very abrupt and deep, and I think it would be nearly impossible to fix any average that would meet the necessity of the case.

Should you not think that a regulation to prevent a stake net extending into an estuary or river farther than low-water at spring or neap tides, would obviate the difficulty you have stated, and afford a standard applicable to all cases?—I conceive that an enactment of that kind might be carried into effect; but with our stake-net fishing there is always some slight projection, though a very slight one; below water-mark, at least as far as I recollect, our nets were never entirely dry; they were very nearly dry. A man walking with the water not above his knee might get at them, but it was a few feet beyond low-water mark. With reference to the navigation of the river, I conceive no legalizing of stake net would enable the proprietors of stake nets by means of them to interrupt the navigation, because they would still become a nuisance if they interrupted the free navigation, and would be abateable I conceive.

Do you conceive that the stake nets afford any facility to the porpoises in catching salmon?—No, I do not think they do; I have seen certainly once or twice, I think, a porpoise approaching a stake-net, and we have taken small porpoises once or twice in the stake nets, but generally speaking, the run of the porpoise is in the deeper waters.

Have you occasion to know any thing with respect to wears or mills, as affecting the salmon fishery in Ireland?—In the lower waters of the Shannon, of course, it being a tideway, no wears or mills can exist but in the upper waters; and in many other rivers in Ireland, the greatest possible anxiety on the subject has prevailed, lest, in any legislative enactment that should take place, any interference in the existing mills should ultimately be made part of the new law; the milling trade of Ireland is one of very peculiar and increasing importance; the force of water-power is a natural advantage, to which we must look for the encouragement of manufactures in that country; and great as the importance of the salmon fishery is to us, we would feel most reluctant in exchanging for that benefit any sacrifice of the means of employing our people, and promoting the manufactures and commerce of the country. I believe that the proprietors of mills are perfectly willing to accept of the strictest provisions that the law can provide to prevent the improper use of wears, or improper modes of fishing, as connected with their establishments, but what they would expect from the Committee and from the Legislature is a careful attention, that, in providing against improper modes of fishing, they should not destroy the value of property. There are some enactments on the Irish statute book, with reference to those wears and mills and manufactories, to which I shall call the attention of the Committee, and which, if amended, I think would meet the necessity of the case, without exciting any clamour or without producing any inconvenience.

Should you think that the milling interests of Ireland would be satisfied on that subject, provided no gratings or fenders were erected at each extremity of their mill-streams, except in such a manner as to allow an undiminished quantity of water to flow into their establishments?—As far as the interests of their mills are concerned, I conceive they would have no reasonable ground of complaint, if the supply and power of water be not interrupted. I do not attach weight to the complaint which they make of the difficulty and the expense of cleaning those gratings; it is one which I think, upon consideration, they would see the propriety of abandoning; but there are cases in which a difficulty would be produced by an enactment as to fenders or gratings. I refer to one particularly which is in the upper water of the Shannon, the mills of a Mr. Gabbett, a very respectable gentleman: there a mill-race is used by him as the means of water-carriage to his mill, and if by a legal enactment he was obliged to put a grating at the head of that mill-race, he would be obliged to abandon his water carriage, and to take a land-carriage. In order to meet a case of that kind there might be a provision introduced, which would

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would enable him at certain times to move the fender or the grating when he wanted to avail himself of his mill-stream for the purposes of navigation, and that I think would meet the inconvenience of which he complains. I wish to guard myself, in the evidence I have given, with regard to the stake-net fishing, as I am in some degree interested in the stake-net fishing myself, that I for one would not suggest any protection to stake-net fishing, except on the principle that it did not appear to militate against the general quantity of fish taken: if the effect of the stake-net fishing was to give to the proprietor a monopoly of fish, to the loss of those concerned in the fisheries above, and to the diminution of the supply in the market, I should be one of the last persons, either as a witness, or a member of the Committee, who would recommend or sanction such a proceeding.

Can you inform the Committee what is the present close time in the river Shannon?—The present close time, in point of law, will appear upon the statute, but unfortunately the provisions of the law in Ireland in practice are, generally speaking, very different from that which appears on the statute book, and a general irregularity has prevailed upon the subject, arising very much, as I conceive, out of the spirit of legislation which has been pursued, and making special exceptions for particular places, which has left the whole law in a state of doubt and uncertainty, and which seems rather to direct the law by a system of favouritism at the particular places, than by any general system which all the King's subjects would be bound to adhere to.

Can you say what you think would be the most desirable close time for that river?—No, I am not able to give information upon that subject, further than considering that the information which has been given by Mr. Fisher, as referrible to the Shannon, is quite correct; I cannot speak from my own knowledge; and if I were to apply to authority I should be inclined to look to him.

Do you consider the decrease which has taken place of late years in the salmon fishery is wholly owing to the want of protection in the river?—I think that is the principle cause; indeed I do not know any other cause to which I can refer the decrease of the number of fish in the river; the decrease in the number of fish taken, as applicable to the Shannon, I attribute to other causes which I have already stated in my evidence.

Do you then consider that that want of protection is greater now than in former years?—I think that it has become very much greater; at the present moment the Committee will perceive that the increase of the population, the increase of the distress of that population, the want of employment which exist amongst them, necessarily expose them to the temptation of poaching where their situation is such as to enable them to poach with effect.

Appendix, No. 2.

Appendix, N° 2.

Draft Obligations by James Finlay and Co. of Glasgow.

WE, James Finlay & Co. merchants in Glasgow, and proprietors of the Deanston cotton works;

Seeing that the landed proprietors, and others interested in the salmon fishings in the river Firth, have offered no objections to the altering the position of the dam-dyke at Lanrick about to be rebuilt, and that they have afforded every facility to the rendering effective the said waterfall lately acquired by us the said James Finlay & Co. proprietors aforesaid, from Sir Evan John Murray Macgregor of Macgregor, Baronet, hereby voluntarily enter into the following obligations, for the purpose of securing in all time coming, to the said persons interested in the fishings, certain regulations and observances for the preservation and safety of the salmon, and which regulations are hereby declared to be a burthen on the proprietors or users of the said waterfall, and on their heirs and successors for ever, and which are described as follow:

First, That a large stone, at least one ton weight, and of a durable nature, and rendered straight and level on the upper surface, shall be placed in the edge of the river, near the site of the dam-dyke at Lanrick, and be there strongly batted to the rock, and shall be so situated that access shall at all times be readily had to it; and the upper surface of which stone shall be placed on a level with the surface of the water in the bed of the river, directly opposite its site, and that at or near the average height of the river, which shall be done at the sight and to the satisfaction of Mr. Alexander Blackadder, civil engineer. From the surface of this stone shall hereafter be reckoned the height of the dam-dyke, which shall in no part, when the water flows over in future, exceed six feet, being the height of the present dam-dyke at Deanston, above the surface of the stream immediately below.

Secondly, That the dam-dyke about to be erected shall run in a line or curve from near the present march, between the properties of the Right honourable the Earl of Moray and Sir Evan John Murray Macgregor of Macgregor, Baronet, on the north side of the river (the precise point of erection to be fixed in the presence of the said noble Earl and Sir Evan John Murray Macgregor, or agents authorized by them to see and approve of the same) and crossing the river in a diagonal direction shall terminate on the opposite or south side of the river considerably higher up: That the back-tail, or retaining part of the building of the said dyke, shall fall with a gentle slope from the surface of the dam, or highest level of the dyke, till it reaches the bed or channel of the river, which slope at the north end of the dyke shall not exceed a declivity of one foot in four feet (4 feet); and from the south end not exceeding one foot in thirty-two (32), and in which slope at the south end shall be formed a channel from the bed of the river below to the top of the dyke at its southern termination, at which part there shall be a slap or opening, at least eight feet wide, and having its bottom one foot below the general level of the top of the dyke, which slap shall at all times be left open and free for the passage of salmon, except when it shall be necessary to close it in order to send a sufficient stream of water down the watercourse to the works during dry periods; declaring always, that when it shall be necessary to close the said opening, it shall only be done whilst the works are going, and the plank-sluice, or other means used for closing the said opening, shall be regularly removed every night when the works shall be stopped, that the water may flow freely, and shall not be again replaced till water is again required for the works.

Thirdly, That a heck or grating shall be at all times kept across the whole mouth of the waterway leading from the dam to the works, the spars of which shall not exceed two inches in width or distance from each other, and shall be kept complete and perfect in all its parts, so as to prevent the passage of any salmon in that way; and further, that during the months of April and May, when the young salmon or smolts are passing down the river, a wire grating or common net, not exceeding one half inch ($\frac{1}{2}$ an inch) in width of opening or mesh, shall be placed in front of or behind the large heck, and shall be kept in its place, and in proper repair during the whole period aforesaid; declaring, however, that during severe frosts, when there shall be danger of the free passage of the water through the said hecks being obstructed by the freezing up of the openings, then, and during the continuance of the said circumstances, it shall be allowed to those carrying on the works to remove and keep out the said hecks, taking care to have them replaced within 24 hours after a complete thaw shall have come on and continued.

Fourthly, That the flow of the stream by the waterway to the mills shall every night, when the mills cease to work, be stopped so as to cause the whole or greater part of the water to flow over the dam-dyke, and shall be so kept at all times when the mills are not going, except when it shall be necessary to draw off the water from the dam to afford access for repairs and other such purposes.

Fifthly,

Fifthly, That a heck, not exceeding two inches in the width of the spars, shall be placed and kept, in all time coming, in good repair, at the termination of the tail-race or water-course which conveys the water to the river after it has passed the wheels, so that salmon may be prevented from passing into or up the said tail-water course; declaring, however, that during severe frosts, when there shall be a danger of the free passage of the water through the said heck being obstructed by the freezing up of the openings, then and during the continuance of the said circumstances it shall be allowed to those carrying on the works to remove and keep out the said heck, taking care to have it replaced within 24 hours after a complete thaw shall have come on and continued. Appendix, N° 2.

Sixthly, Declaring, that when they, or any of their servants or others employed by them, shall be convicted of wilful breach or careless neglect of the aforesaid regulations or observances, they the said company shall be liable, over and above performance, in a penalty not exceeding fifty pounds for each offence, if prosecuted for within six months after commission, recoverable by summary process before the sheriff of the county, whose judgment in all such or any other questions arising out of this transaction, shall be final and conclusive, and not subject to review or appeal in any court by advocation, suspension, reduction or any other form of law; the one half of the said penalty to go to the persons having an interest in the fishings, raising the action, the other half to the poor of the parish.

The said company further declare that they shall use their best endeavours to prevent the killing or destruction, by unlawful means, of salmon or salmon-fry within the bounds of the said waterfall.

It is further declared, that the said company shall at their own expense remove the whole or part of the present dyke at Deanston as soon as the dam at Lanrick shall be in full operation; and that, at the request of the Right honourable the Earl of Moray and Sir Evan John Murray Macgregor of Macgregor, Baronet, or at least four proprietors interested in the fishings.

And they agree to the registration hereof in the books of Council and Session, or others competent, there to remain for preservation.

Appendix, No. 3.

PLAN of the Dam Dyke, and part of Waterway, with hecks and sluices, as proposed to be erected on the site of the old dam, on the river Firth, at Lanrick. Appendix, N° 3.

See Plan, No. V

Appendix, No. 4.

PLANS of Salmon Hutches. Appendix, N° 4.

See Plans, No. VI. VII. VIII.

Appendix, No. 5.

PLAN of Cruives for Fishing on the River Shinn. Appendix, N° 5.

See Plan, No. IX.

Appendix, No. 6.

Description of the Drawing, showing the progress of the Spawn of Salmon. Appendix, N° 6.

Fig. I.—Represents the egg, pea, or spawn of the salmon, of its natural size, after the fish has become quick in it. The body of the fish, in this stage, appears of a pinkish tinge, and the great size of the eyes very disproportionate.

Fig. II.—The shell just burst, and the head of the fish protruding from it.

Fig. III.—The state of the subject eight hours after it had burst the shell. The pulsations of the heart distinctly visible.

Fig. IV.—The shell just thrown off, the tail drooping; before the shell bursts the tail envelops the yolk or bladder, which is seen attached to the body of the fish. The shell is transparent; about a third part of it is fractured by the fish in extricating itself.

 Fig. V.—

Appendix, N° 6.

Fig. V. —The tail becomes straight, and the fish more lively, the mouth distinct, and the lower jaw and pectoral fins, which are quite transparent, are in motion, and keep time with the heart, which beats sixty to sixty-five times a minute; at first, the body of the fish is colourless, with slight marks of articulation of the bone, or of stripes on the skin; the bag attached to the fish is transparent; it is filled with a light amber-coloured albuminous fluid, with some drops of a clear rose-coloured oil in it, similar to the oil from a full-grown salmon.

Fig. VI.—Represents No. 3 magnified. The opening of the shell is seen to bind the fish, showing that some exertion is still required to break from it; the bag is extremely soft, yielding to the shape of the vessel when the fish rests at the bottom.

Fig. VII.—Represents No. 5 magnified. The heart is seen before the pectoral fins, and under the throat, connected to the large blood-vessel which runs along the front and bottom of the bag; a day or two after the fish leaves the shell, the bag which was at first round becomes more and more elongated, and it appears to have an outer case, a transparent part apparently empty being seen at the end, with a microscope the circulation of the blood is seen; the blood flows from under the body of the fish, through the blood-vessels, ramified along the sides of the bag, and is there collected into the large blood-vessels before mentioned connected with the heart; an equal quantity of air, or some other transparent substance, circulates along with it; the blood is drawn by the heart from the larger blood-vessel, and thrown in regular pulsations into the vessels of the head and throat, where it assumes a darker colour; the rays of gills are distinctly seen; the body of the fish soon begins to assume a brownish colour.

Fig. VIII.—A sketch of No. 5 magnified, to show the direction of the circulation of the blood.

See Plate, No. X.

Appendix, No. 7.

Appendix, N° 7.

PLAN of stream-fishing on the river Spey.

See Plan, No. XI.

Appendix, No. 8.

Appendix, N° 8.

An Explanation of the Dam Head at Warkworth, in Northumberland.

AA.—The waterfall built of freestone and wood, crown-tree fixed above and below with struts or stays, as shown on the fall-side.

BB.—Wood, three-inch plank, (commonly called the apron) to prevent the fall of water injuring the foundation.

CC.—Framing of wood packed or penned with large stones, and wedged, as a further security to the wear or dam, commonly called the lower apron.

DD.—The flank-walls.

EE.—The fish-race, which varies from about 16 feet to 30 feet wide, and about 360 feet long.

F.—Are two sets of sluices; one set are railed, (commonly called hecks,) the other are floodgates, to turn the water over the dam when the fish are to be taken.

G.—Two sluices, or hecks, to shut the fish in where they are taken before the water is set off at F. The fish are taken in the race between F. and G.

H.—Mill-hecks and sluices.

I.—Mill-race.

J.—The manor mills.

K.—Miller's house and offices.

—The course of the river.

The dam is built with seven course of freestone, from flank-wall to flank-wall, the crown-tree forming the upper course; each course shows about 9 inches upon the top, and the front of each course about ten inches, making the dam in height, allowing for joints, about 6 feet.

The length of the wear, or dam, is about 180 feet; the planking below the dam is about 12 feet, the penn-work, or lower apron, about 28 feet, making, from the bottom or foundation

dation of the dam, over the upper and lower apron to the water, clear of workmanship, about 40 feet. Appendix, N° 8.

I ought to have said, from flank-wall to flank-wall is about 180 feet.

In the summer so much water does not run as is shown below the dam; it then is confined to a stream north of the gravel bed, shown at the bottom of the plan.

It appears evident from the plan, that if the fish-race EE, was always open, the mill would have abundance of water; for when the lock is open to permit the salmon to go up the river to spawn, there remains in the mill-race I, a great body of water.

See Plan, No. XII.

Appendix, No. 9.

Section of Warkworth Mill Wear, and Flank-Wall in part. Appendix, N° 9.

See Plan, No. XIII.

Appendix, No. 10.

An Explanation of the Plan of the Wear or Dam at Acklington Park, in Northumberland. Appendix, N° 10.

AA.—The wear or dam 10 feet perpendicular height.

aa.—A sluice-tunnel and watercourse through each flank-wall, to let the water through when the dam or wear is to repair.

BB.—Flank-walls.

CC.—Sluices both for mill and fish-race, seldom used, rarely open.

D.—Brainshaugh burn.

EE.—Fish-race.

FF.—Mill-race.

G and K.—A sluice and outlet for water, when the mill-race wants to be repaired or cleaned.

HH.—Mill, fulling-mill, dye-house, &c.

II.—Cottages.

JJ.—Outlets from mill, and fulling-mill wheels. This mill is used for the manufacture of flannel.

The wear or dam from flank-wall to flank-wall is about 150 feet

The cut between the sluices CC. is about 120 feet.

The mill-race, from where the fish and mill-race unite at the sluices to the mill, is about 600 feet.

Fish-race from the same place to the river about 300 feet.

This wear or dam is about six miles from the sea.

By the course of the river above ten miles.

The wheels are within the walls of the mill and fulling-mill.

The fall of water over the wear is perpendicular, about 10 feet.

L.—The bason, though full of water, has a cut through a freestone rock, 30 feet thick, into the clay.

It is about 45 years ago since this dam-head was built, since which period the salmon have totally deserted the river Coquet; before the said dam was erected salmon were so plenty that they sold for 1 *d.* per lb.; and the old inhabitants can recollect when the salmon-trout, or bull-trout, was as scarce in the Coquet as the salmon now are; from this it appears, that since the erection of the dams the salmon have forsaken the river, and the bull-trout taken their place.

See Plan, No. 14.

Appendix, N° 11.

Appendix, N° 11.

Sir, Fortrose, 25 June 1825.

I NOW beg leave to hand enclosed the remaining statements of fishings required from me by the Committee on Salmon Fisheries; reference may be made to the notes subjoined to that of the Connon.

I am Sir, Your most obedient,
Jn° Steavenson.

STATEMENT of the Quantity of Fish killed monthly at the Stells of Connon, during the Years 1805 to 1824.

	1805:		1806:		1807:		1808:	
	Sal.	Gril.	Sal.	Gril.	Sal.	Gril.	Sal.	Gril.
March	882	–	200	–	208	–	202	–
April	1,457	–	2,070	–	1,830	–	1,004	–
May	1,100	–	902	–	3,296	9	1,915	70
June	1,000	190	1,016	57	1,209	507	1,800	600
July	355	1,332	366	1,445	881	3,662	1,073	1,440
August	210	1,431	31	1,329	232	1,555	470	892

	1809:		1810:		1811:		1812:	
March	493	–	200	–	40	–	141	–
April	928	–	664	–	160	–	196	–
May	1,008	–	1,385	–	132	–	207	85
June	775	211	813	15	581	5	163	1,126
July	269	1,148	230	287	170	233	32	690
August	38	352	50	415	89	266	4	41

	1813:		1814:		1815:		1816:	
March	205	–	160	–	200	–	25	–
April	295	–	240	–	260	–	60	–
May	382	–	948	–	340	–	140	701
June	814	–	372	1,317	85	621	306	1,360
July	73	438	79	1,123	83	5,080	830	4,070
August	27	488	10	152	4	145	340	2,176

	1817:		1818:		1819:		1820:	
March	40	–	66	–	40	–	87	–
April	165	–	303	–	63	–	96	–
May	316	651	109	–	169	–	123	–
June	470	1,860	162	–	163	30	169	118
July	360	2,371	107	880	177	609	108	3,143
August	110	1,071	68	904	20	310	34	871

	1821: (*a*)		1822:		1823:		1824:	
March	385	–	152	–	68	–	60	–
April	292	106	724	–	200	–	412	–
May	163	670	711	–	451	–	463	–
June	200	600	436	144	266	643	177	109
July	270	1,100	288	836	134	2,964	188	3,386
August	194	354	40	298	14	389	26	811

(*a*) Cruives of Connon were held by me this season.

Note.—During the years 1819 and 1820 the Connon Stells were fished by two tenants, consequently what is stated for these two years is but half the produce.

Jn° Steavenson.

STATEMENT of the Quantity of Fish killed monthly on the shores of Fortrose, during the years 1810 to 1824.

Appendix, N° 11.

	1810:		1811:		1812:		1813:	
	Sal.	Gril.	Sal.	Gril.	Sal.	Gril.	Sal.	Gril.
March	12	–	24	–	14	–	91	–
April	89	–	103	–	22	–	132	–
May	131	–	133	–	40	–	143	–
June	192	24	95	27	49	128	54	98
July	78	201	48	101	50	148	46	580
August	68	83	46	65	36	273	29	276
	1814:		1815:		1816:		1817:	
March	61	–	92	–	102	–	92	–
April	202	–	109	–	103	–	140	–
May	254	–	261	–	558	–	206	–
June	221	538	101	39	233	324	143	141
July	52	755	103	470	109	676	183	457
August	39	78	26	166	192	726	133	170
	1818:		1819:		1820:		1821:	
December	–	–	15	–	53	–	34	–
January	–	–	40	–	60	–	80	–
February	20	–	17	–	94	–	147	–
March	58	–	97	–	278	–	200	–
April	171	–	80	–	209	–	285	–
May	194	–	166	–	219	–	187	–
June	108	61	74	1,292	96	647	71	196
July	103	403	90	1,420	76	1,060	140	786
August	40	228	30	102	31	353	138	133
September	49	156	24	137	23	185	–	–
	1822:		1823:		1824:			
	Sal.	Gril.	Sal.	Gril.	Sal.	Gril.		
December	24	–	12	–	27	–		
January	68	–	15	–	44	–		
February	86	–	23	–	70	–		
March	91	–	62	–	94	–		
April	172	–	101	–	123	–		
May	263	–	159	96	163	64		
June	117	139	86	201	127	140		
July	97	490	92	438	108	1,212		
August	72	149	65	313	67	725		
September	50	73	15	64	24	187		

Jn° Steavenson.

Appendix, No. 11.

STATEMENT of the Quantity of Fish killed monthly in the River Ness, during the years 1821 to 1824.

	1820:		1821:		1822:		1823:		1824:	
	Sal.	Gril.	Sal.	Gril.	Sal.	Gril.	Sal.	Gril.	Sal.	Gril.
December - -	25	–	218	–	70	–	30	–	43	–
January - - -	150	–	300	–	130	–	40	–	100	–
February - -	167	–	440	–	282	–	12	–	99	–
March - - -	159	–	402	–	77	–	41	–	57	–
April - - - -	110	–	244	–	54	–	18	–	47	–
May - - - -	82	–	112	–	19	–	6	–	29	–
June - - - -	5	45	3	–	1	–	2	5	22	137
July - - - -	2	137	6	85	8	8	9	111	62	377
August - - -	21	179	98	1,057	43	68	32	350	127	1,117

STATEMENT of the Quantity of Fish killed monthly in the River Thurso and Bay, during the years 1821 to 1224.

	1821:		1822:		1823:		1824:	
	Sal.	Gril.	Sal.	Gril.	Sal.	Gril.	Sal.	Gril.
December -	283	–	86	–	47	–	159	–
January - -	215	–	408	–	82	–	193	–
February -	289	–	244	–	–	–	95	–
March - -	717	–	229	–	153	–	233	–
April - - -	246	–	121	–	130	–	228	–
May - - -	412	4	171	–	183	45	160	–
June - - -	332	62	199	173	83	234	341	78
July - - -	342	1,876	154	1,978	266	3,641	244	1,427
August - -	345	2,547	80	2,065	105	3,098	176	2,433

Jn° Steavenson.

Appendix, No. 12.

Appendix, N° 12.

LETTER from Mr. George Houy to the Chairman.

Sir, Edinburgh, 4th May 1825.

HAVING been requested to state in writing any information I possess regarding the present state of the fishings of the river Tweed and the streams connected therewith, and my views and opinions as to the most effectual mode of preserving the brood of salmon, I now take the liberty to make the following remarks in the order in which they have occurred to me.

That the salmon fisheries of Scotland have of late years decreased cannot, I think, be disputed, and there is not the least doubt that in the river Tweed the number of salmon caught within these last ten years, with all the improved modes of net-fishing, bears a very small proportion to those caught during a similar length of time previous. It is an observation quite common among the old fishermen that in their youth there were then twenty salmon for one now; and this, generally speaking, I believe to be the fact, for scarcity has been felt throughout the whole line of the Tweed, but particularly in the middle and upper districts, where, at a former period, salmon were caught in such abundance as to be a principal article of food. So much indeed was this the case, that I have been informed that in some old indentures between master and servant, it was a common stipulation on the part of the latter, that he should not be obliged to eat salmon more than four times in the week. To the constant and persevering manner in which the river from Berwick to a little above Norham, a distance of ten miles, is fished, the recent scarcity of salmon has been attributed by the upper proprietors. It is certain, that in this line the nets are unceasingly plied, and with the exception of Sundays, *they are never all idle.* So perfect is the system too, that unless on the occasion of a flood, it is next to impossible for salmon to escape. Many instances besides are on record of nets having been placed *straight across the river on Sundays* by the fishermen in that district, thereby obstructing entirely

entirely the advance of the salmon to the manifest injury of the upper fishings; the only periods, therefore, at which these fishings can be stocked with salmon are when the river is flooded, and *during close time*. The consequence of the severe manner in which the river is fished below has been to render the upper proprietors, and the inhabitants of these districts generally, not only perfectly indifferent as to the preservation of the breed of salmon, but even anxious to destroy as many of the fish themselves as they can at the only season they are permitted to visit them. They do not consider themselves bound by any moral or legal obligation *to become conservators of a river from which they derive no benefit, nor preservers of salmon merely for the fishermen of Berwick to destroy*. The effect of all this is, that along the whole course of the river the salmon have no respite, but are pursued and killed wherever they appear, by the lower fishermen at one period, and by the inhabitants of the upper district at another. No wonder then that salmon have of late years decreased. Till, therefore, *it shall become the interest of all the proprietors of the river to preserve the brood of salmon, and till all participate in equal measure of the advantages of such preservation*, I am fully persuaded of the utter inefficiency of all legislation that shall not have these objects for the basis of its enactments. The manner in which I conceive they might be accomplished and justice done to all, I shall afterwards state.

The fishings, so far as regards their present value upon the river, may be divided into the following classes: The first comprehends the short distance from the mouth of the river to Berwick Bridge, where alone there are, I should suppose, more salmon taken than in all the remainder of the river. From Berwick Bridge to Norham, to which place the tide reaches, may be considered the second. To this place the net and coble only are in use. From Norham to Coldstream Bridge the fishings are of still less value; and here, besides the net and coble, the various modes of fishing practised in the river are also in use, *rod-fishing*, "*setting*," *leistering*," "*cairn*," and "*hanging*" and "*straik*" nets. From Coldstream Bridge to Kelso, the net and coble are only partially used in floods, and on Mondays, when by the cessation of the lower fishings on Sunday the salmon get farther up. I have seen from 100 to 500 salmon and grilses caught at Kelso on a Monday morning by the net and coble. From Kelso to the higher districts of the river the principal modes of legal fishing are by the rod, leister, cairn and straik-net.

I do not suppose it necessary for me to enter into any history of the various sorts of sea fish that haunt the Tweed, or to discuss the different opinions which have been formed as to their affinity to each other. It may be sufficient here, in order to enable my subsequent statement to be fully understood, to explain the provincial names by which the different kinds are distinguished. The first then in value and importance is the "*clean salmon*," by which is meant the salmon in its best state. It makes its appearance about January, though I have seen it so early as the middle of October, and it becomes more plentiful in April and May. It is in the finest condition in the earliest part of the season, and is valued in proportion to *the smallness of the "roe" or melt it contains*. As the season advances and the spawning period approaches, the clean salmon become every day less so, and eventually degenerates into the *kipper salmon*, (the name by which the male) and the *baggit salmon*, by which the female is distinguished. These terms are applied from the month of August, or thereabouts, till after they have spawned, when they receive the indiscriminate designation of *kelts*. The grilses, or "*gilses*," as they are called, make their appearance, according to the season, from the end of June to the middle of July, and are called at first merely grilses; as the season advances, and spawning time approaches, they receive the same addition as the salmon, and are called *baggit gilses, or kipper gilses*, according to their sex; and after spawning come under the general name of *kelts*. Their weight at the beginning of the season is about three or four pounds, and it increases as high as eleven pounds; I once saw a grilse killed in September, in fine condition, which was rather above that weight. *Whitlings* appear in vast numbers early in *May*, but at that season do not proceed far up the river, and indeed, till the latter part of the year I have seldom met them above Kelso; they are killed, however, in the small rivers in close time in great quantities; but when in proper season are taken in considerable numbers a few miles below Coldstream, at the mouths of the Till and Blackadder; their general weight is from two to five pounds; I never saw a whitling above five pounds. The *bull-trout*, the general size of which is about that of the whitling, though I have seen them as heavy as 22 pounds weight, appears in great plenty at the same time, but is in fine season only in the months of January and February. There is another small fish, the *silver-white*, of little value to the fisherman, though greatly prized from its excessive sprightliness by the sportsman, weighing from half a pound to two pounds and a half. It is found in fine season as late as November.

Having said so much, I may go a little farther, and trace the salmon-fry from its infancy till its full growth and perfection, premising only, that I do not mean to express a confident opinion on a subject on which there are so many theories, plausibly supported, and where there are so many obstacles to perfect elucidation. The young fry are first noticed in the Tweed about the size of full-grown minnows, though I have seen them perfectly formed not more than an inch in length. The fishermen have often dug them out alive from the channel, which by the receding of the river had been partially uncovered, and the spawning bed forsaken. They appear in great shoals about the middle of April or beginning of May, and exhibit the shape of the grilse as nearly as possible. The slightest swell of the river carries them off, and after a flood not one is to be found. Their general size is from four to six inches in length, but they grow with astonishing rapidity; and it is a fact which can be attested by every observer, that in seasons when the river is kept for a long period very low, by a continuation of dry weather, the smolts increase amazingly

Appendix, No. 12.

in size; I have myself caught them as large as fine trout, and nearly *ten inches* in length. In the course of two months after, they disappear, and are carried off by floods. Grilses are first found at the mouth of the river, small in size, but as the season advances increasing; they proceed upwards, and deposit their spawn, preferring for that purpose easy and shallow water, with a sandy or rather a gravelly bottom. After spawning they are in so weak a state that a flood of no ordinary size will carry them back to the sea, at least, after large floods, they are never found *in the Tweed* in such numbers as before. They now remain some time in the sea, and return during the autumn as salmon, and spawn a second time, or, which is a prevalent and perhaps the correct opinion, are the early salmon of the following season.

It is of more importance, however, to attend to the state of the fish at the particular periods of the year, and I think there can be no doubt that the legal period of salmon fishing in the river, in place of extending from the 10th January to 10th October, as at present, should only extend from the 10th day of March to the 15th day of October; the grounds upon which I offer this opinion are these: in the course of the river from Coldstream Bridge upwards, between the 10th January and 10th of March, for every clean salmon that is caught there are *at least* fifteen foul and *unspawned fish*, and the brood, to a very great extent, is thus by the existing laws legally destroyed. In my whole experience I cannot say that I recollect to have seen a kelt or spawned salmon sooner than January; and from all the observations I have been able to make that month and February are those in which the spawning is generally accomplished. After the 10th of March the great proportion of the salmon have spawned, and, though foul and unwholesome fish, may be caught; the brood is thus effectually preserved. I state this average from having long observed, with much regret, the great destruction of unspawned salmon in the early season of the year; though the number killed by the rod and line is certainly very small in comparison to the quantities *destroyed in the tributary rivers during close time. It is in these streams that the great injury is principally done to the spawning salmon, and if it were possible to preserve them from destruction while there, the brood would in a twelvemonth become as numerous as ever.* But so long as salmon are permitted to enter these small streams all attempts to save them from destruction must be abortive. It would take at least 500 men to watch them night and day during close time, and even that number would do the business very ineffectually. From the number of small rivers which swell the waters of the Tweed and Tiviot, the quantities of salmon that ascend them are proportionately great; they enter when they are in a flooded state, and proceed as far as they have water to carry them. The moment that these streams subside into their ordinary dimensions (varying from eight yards to two yards, or six feet in breadth) the salmon are exposed, and the work of destruction commences; the artizans of every village, and the servants of every farm, engage in their pursuit, and the water in a few days is completely "*harried.*" They use *leisters*, the provincial name by which the salmon-spear is known) and *hooks*, something like the common boat-hook, with a large and sharp hook at the extremity of the shaft; in the absence of these the common dung-fork is put in requisition, and so effective is the work, that I am fully convinced that not two salmon out of one hundred that ascend these streams are permitted to deposit their spawn; and certainly not five in a hundred ever return to the main river, or to the sea. It has, therefore, long been an object of consideration with me to *prevent the access of salmon altogether into these smaller streams, and confine them to the main rivers, the Tweed and the Tiviot.* The small streams to which I allude are as follow: first, the Adder, comprising the White Adder and Black Adder; the Till, the Eden, the Kale, the Oxnam, the Jed, the Ale, the Rule, the Slitrig, the Gala, the Carter, the Borthwick, the Leader, the Ettrick, the Yarrow, the Lyne, the Eddlestone, the Manor, the Quhair, and some other smaller brooks and mountain-streams. There is no right, I believe, of salmon fishing belonging to any of these rivers, and the plan I am about to propose could not interfere with any patrimonial interests whatever. At a very short distance from the junction of these streams with the Tweed or the Tiviot let a *wear or dam*, strongly built, and from six to nine feet in height, be erected, over which of course the water would find a perpendicular descent of nearly that height, and which would be a complete barrier to the progress of the salmon; at this place during close time a water-bailiff must be stationed for the protection of the salmon, which will of course collect in numbers for some time, but finding their progress in that direction barred, they will gradually disperse for other spawning ground, of which there is ample space in the main rivers. That this scheme is practicable I am perfectly satisfied from personal observation; and those streams, the mouths of which I did not sufficiently remember, I have, within these few days, made a point to visit, and I can now state that the erection of a wear at the entrance of each is perfectly practicable, and that, in my estimation, at an expense in no case exceeding 150 *l.* Indeed, in *the Leader*, a stream rather larger than the average of these I have named, about 300 yards from its junction with the Tweed, a wear of the kind I propose was erected several years ago, and during its existence in its original state not a single salmon could find its way up that stream. It was only of late, in consequence, I have been told, of the complaints by *the weavers and poachers about the village of Earlston*, "that they were deprived of their usual share of salmon and winter food during close time;" that a "slap" or "sluice" was opened by the proprietor, and the salmon are now killed in as great plenty during that season in the Leader as ever. Were this plan adopted several important advantages would be obtained; the great proportion of the fish would be saved from certain destruction, and the main rivers would be more easily and much more effectively preserved during close time. Certain I am, that in the main rivers

rivers, the Tweed and Tiviot, there is not one salmon taken for ten that are killed in the smaller streams I have named. Appendix, No. 12.

As to the legal modes of fishing at present practised in the Tweed and Tiviot I may state that there are some which ought certainly to be abolished. The first and most destructive are the "*cairn nets*;" this mode can only be pursued when the rivers are flooded; a large quantity of stones are placed by the side of the river where it runs rapidly, and in the "eddy" or pool caused thereby, a net of a peculiar construction is placed; the fish naturally seek the side of the river in full and heavy waters, and must fall a prey to these nets. In close time, too, they are the favourite haunts of poachers, as they can be fished with little risk of detection, and the nets used are of comparatively small value, being only from 5*s.* to 12*s.* In close time, too, the heavy unspawned salmon most naturally avoid the rapid and seek the easier water at the side, where these destructive engines are placed. I have myself seen taken from one of these nets from twelve to fourteen large spawning salmon *in the course of one evening, in close time, by a fisherman.* I would therefore strongly recommend the entire abolition of "*cairn-nets,*" or nets set in eddies or pools, *as being of use only in close time.*

The next mode of fishing is that of "*setting.*" In the upper districts of the Tweed, in the long reaches of deep water, the salmon collect when the river grows small and clear; a vast number of nets are placed in this *reach* in every direction, and the water is disturbed by boats or lights, or bleached *horse-heads,* and the salmon are driven into the nets and caught. In "*burning the water,*" again, the nets are spread in a similar manner, and one or two persons armed with "leisters" stand in the boat; a person with a light, made generally of *tarred rags,* stands in the centre, and the moment a fish is observed within reach it is immediately struck and killed. In close time, in the higher districts, where the waters are small, this mode is pursued without boats, but with equal success; as by this mode of fishing few salmon in fine condition are ever killed, it ought also to be abolished. The only remark I have to make of the net and coble-fishing is, that the net ought never to be allowed to *be set* or kept anchored in the water, like a sort of stake-net, as is common at the mouth of the river, but that it ought to be fairly *rowed out and brought immediately home*; and thus all standing or set-nets should be strictly prohibited.

Although the prohibition of these modes of fishing may be thought at first sight in some degree to affect the value of the upper fishings, yet I am convinced if the other plans are followed with regard to the preservation of the unspawned salmon no loss will eventually take place.

I think it needless to offer any remarks regarding the preservation of the salmon-fry, as the quantities that are killed by mills and young sportsmen in the river, are not one for twenty destroyed by large trouts, and the salmon themselves, which feed almost entirely on them while they are in the rivers.

I have already expressed my opinion as to the extension of the period of close time or fence-months; but I am further of opinion that the weekly close time ought to exist from noon-day on Saturdays, till day-break or six o'clock on the mornings of Monday. This would, at all proper seasons, ensure a share of the fishings to the upper proprietors, and render them considerably more anxious to preserve the salmon during the fence-months. I calculated the general progress of salmon up the river at little more than a mile per hour, though in the earlier period of the season they certainly move upwards more rapidly; this space of time *free* would, therefore, allow the salmon an unmolested run of about 45 miles, or nearly to Melrose.

I beg to apologise to you for the length of these remarks. Though hastily put together, they are the result of long and anxious consideration; and whether the suggestions I have made be adopted or not, I trust Parliament will not longer delay some new enactments for the preservation of the salmon brood. Any alteration of the present system must be an improvement.

I have the honour to be, Sir, your most obedient Servant,

George Houy.

To T. F. Kenedy, Esq. M. P. Chairman of the
Committee on Salmon Fishings.

Appendix, No. 13.

Observations on Salmon Fishery, by the Tacksman of Mr. Forbes, of Seatons Fishings, Mr. Moir. Appendix, No. 13.

BETWEEN the 1st of May and 20th September 1823, I received all the salmon caught in the stake-nets situated between the rivers Don and Ythan, also the whole fish taken in the bay of Nigg, at the bridge of Dee, and nine other small fishings in that river. This gave me an opportunity of comparing these fish daily; the result was, that all the salmon caught in the sea had exactly the same appearance; the river fish were softer and inferior.

As all the fish were cut up for the purpose of being preserved in a fresh state, I had an opportunity of examining their stomachs. I never could detect food of any kind in the stomachs of salmon taken in the upper river fishings; whereas those taken in the sea were frequently gorged with food, which was principally sand eels. I strongly suspect that the salmon frequent the flat sands between the Don and Ythan, for the purpose of feeding, (and

Appendix, N° 13.

not for scenting out the Don, as the proprietors assert,) because, if the fish were coming along shore, seeking out the river, the most northerly nets would intercept them; but we know, in practice, that the nets in the centre of the twelve complained of, take as many salmon as those at the extremities, and as many are caught at the ebbing as at the flowing of the tide. A very successful stake-net fishing is carried on on the sands at Musselburgh, and another at Aberlady; these sands abound with sand eels; the one station is thirty, and the other forty miles, from a spawning river;—a pretty good proof that the salmon frequent such situations for feeding alone.

It does not appear probable that salmon always return to the river in which they were spawned. Mr. Pennant was of a different opinion in describing the river Ban in Ireland. He says, "The mouth of this river faces the north, and is finely situated to receive the fish that roam along the coast in search of an inlet into some fresh water."

Mr. Pennant visited all the great fishing stations, and studied the habits of the salmon in the river, the estuary, and the sea, and not in the library, as it is evident some of the other authors have done; his opinion, therefore, deserves the greatest respect.

This theory is also contradicted by experienced fishers, even in the Don itself. If they are asked concerning the fishings in the Ythan and Uggie, they reply that these are late fishings, as they do not get fish until the salmon fall down from the Dee and Don; or, in other words, that the salmon that occasionally enter the Dee and Don, in the early part of the season, also visit the Ythan and Uggie in the end of the season, in their way north.

Causes of Salmon Fishings not being so productive as formerly.

Salmon are only found in very small numbers in rivers during winter; and as the only method of sending them to market formerly was in a salted state, in that state they brought a low price, and would not pay the expense of fishing, therefore the salmon fishings seldom commenced in earnest before the 1st of May. The defective or pernicious tendency of the laws were not therefore brought into operation till the discovery of a method of sending the salmon to market in ice. That plan was first practised in the Tay; and as the fishers frequently received ten times the price that they would have brought in a salted state, this plan was of course adopted in every situation, when conveyance could be got; and it is now carried that length on this coast, that fresh salmon, during the winter months, are sent in small boxes, by the mail coaches, from all rivers as far north as Fortrose to Aberdeen, where they are packed in ice, and forwarded to London.

Since this system was followed the fisheries are industriously prosecuted in all the rivers with net and coble, from the 12th December, in doing of which the breeding fish are frequently killed, and the bottom ropes of the nets, passing over the spawning beds, destroy immense quantities of the spawn, even before it is animated; and there is scarcely a river where the smolts have not a chance of being drawn twenty times ashore between the spawning ground and the sea, by which great numbers are killed.

Thus the proprietors of rivers, and their tacksmen, from the greed of present gain, are ruining the fisheries, and they will certainly accomplish it if they are not prevented by the legislature.

The same causes have had the same effects in Ireland. Mr. Pennant says, that the salmon fishery at Cranna, in the Ban, one mile and a half below Coleraine, produced 320 tons of salmon in 1760; it was then only fished in May, June, July and August. I visited all the salmon fishings in the North of Ireland in October 1822, at which time the Cranna fishery only produced 45 tons; and the fisheries generally had decreased nearly one half in the fifteen preceding years, and all this without the aid of stake-nets, for there was not a single one upon the whole coast.

These facts are certainly alarming, and the only measures that can save the salmon fishery from destruction, is to prohibit fishing in all the rivers from the 20th September to the 1st of May; the breeding fish and the spawn would then be completely protected, and the smolts would reach the sea in safety; both river and sea fishings would then be more productive than ever they were at any former period.

Stake-nets.

Stake-nets do less injury to salmon fishing than any other method of fishing, (those on the sea shore we mean) because the nets are immovably fixed, and the meshes are extended to their full size. Smolts, or salmon-fry, and all other kinds of small fishes, pass easily through them; and as foul, or new spawned salmon, always go into deep water, on leaving rivers, there is not an instance of a smolt, or foul fish, being taken in a sea stake-net.

In erecting stake-nets, they are always placed in a direct line from high-water mark into the sea, that they may meet the tide, and give the least possible resistance to it; the fish chamber, or trap, is placed at the end of the net that extends farthest into the sea; this must be left dry at the ebb of every tide, that the fish may be taken out, and the net receive necessary repairs. On this account, sea stake-nets seldom reach 200 yards in length, therefore they can only intercept salmon that come within that distance of high-water mark, and probably not one half of these, because when a salmon, or other large fish, comes in contact with a stake-net, it runs along it, and has a much greater chance of escaping the trap than going into it; if it does escape, it proceeds on its way undisturbed and uninjured.

Now,

Now, in estimating the justice of the Don fishers complaint, it is necessary to keep in view, that the proprietors of the stake-nets have an undoubted and undisputed right of fishing with net and coble on the exact spot where the stake-nets are erected; is it not therefore evident, even allowing the Don fishers the full benefit of their own assertion, that salmon are scenting out the Don? That if a coble, with a net 200 yards long, were to commence fishing at high water, on the identical spot where one of the stake-nets now stands, that it would intercept precisely fish which are now stopped by the stake-net? Were the same net and coble used at ebb tide it would intercept salmon 200 yards beyond the reach of the stake-net; it is therefore quite clear, that by a vigorous prosecution of the net and coble method a greater quantity of salmon could be caught on the ground in question than by stake-nets, but at a far greater expense. The matter therefore at issue is, not the taking the salmon, (for the proprietors of the sea-fishings can do that unchallenged,) but whether they are to be debarred from practising a beneficial improvement in the exercise of their legal and undisputed rights, or to be compelled to follow a rude and unprofitable mode of fishing, for the purpose of serving the interest, the whim, or caprice, of the river proprietors. Appendix, N° 13.

The Don proprietors have passed over all the evidence given before the Committee of the House of Commons by practical fishers, and adhere to that given by Sir Humphry Davy, as better suiting their purpose; but on reading over his statement we cannot help suspecting that he has formed his opinion from books which have been wrote on the subject, and not from personal observation. Besides, Sir Humphry draws his conclusion, that stake-nets should be abolished, from the erroneous assumptions that salmon and salmon-trout belong to the river in which they were spawned, and that each variety of salmon and salmon-trout affects a particular river, and always returns to it; and also, that salmon-fisheries were never considered as belonging to the coast. As Sir Humphry is completely wrong in both these cases his conclusion should of course fall to the ground. Sir Humphry, in the same sentence, says, that a strong net put across an estuary might in one year destroy the whole fishery of a river. We are at a loss to conjecture what connection can possibly exist between a strong net put across an estuary, and a sea stake-net fishing. Upon the whole, we do not think it too much to suppose that Sir Humphry Davy never saw a sea stake-net.

That salmon rivers are materially injured by manufacturing establishments being erected on the banks can be satisfactorily proved, although the Don proprietors are unwilling to admit it; indeed, salmon will not enter foul water of any kind, if they can avoid it. A case exactly in point occurs in this neighbourhood.

The bay of Nigg is perhaps the most productive sea-fishing on this coast; yet when the Dee is discoloured by peat-bog water, that water is carried into the bay of Nigg by the flowing of the tide; at such times not a single salmon will enter it, and the fishing is frequently interrupted for several days together by this cause.

Salmon cannot be called river fish, because they live at least eleven months every year in the sea, and it is in the sea alone that they feed, grow and thrive. Whatever may be the cause of their visiting a river, it is certain, that remaining even twenty-four hours in fresh water materially injures them, and that being confined eight days in it renders them weak, sickly, and even useless.

Appendix, No. 14.

IN the within statement it will be observed, that in the year 1818 I had charge of *five* stake-nets, in 1819 *four*, and only *two* in the three following years, and *three* in the year 1823. In the first of those years the total quantity of fish caught was 837 salmon, and 528 grilses; whereas the following year, where there were only four nets, the quantity taken was 2,337 salmon, and 2,603 grilses. The nets being afterwards taken by Mr. Steavenson, at an increased rent, I have no data to ascertain the quantity of fish taken at those nets which he occupied; but I am led to suppose that the quantities taken on the *Cromarty* and *Newhall* properties alone, could not be less than 3,000 annually; and computing the other seven nets on the frith to average 500 fish annually, the total number will yield 6,500 fish annually. From this statement, which is by no means over-rated, it is evident what an immense loss would accrue were stake-nets abolished, as the rivers still yield *nearly* an equal quantity of salmon to what they did before the erection of stake-nets; besides that the number of men *annually* employed at those nets derive, in cumula, a sum not less than 1,000 *l.* sterling. From this view of the salmon fishing in this frith I am decidedly of opinion that a vast benefit is derived from the stake-net fishing; that the fish are superior to the river fish; and that it is quite impossible that stake-nets can in any way whatever injure or destroy the salmon-fry. Appendix, N° 14.

Ja. Taylor.

Cromarty, 25 April 1825.

Appendix, N° 14.

ACCOUNT of Salmon taken in the Cromarty Frith

	January.		February.		March.		April.	
1818:	Sal.	Gril.	Sal.	Gril.	Sal.	Gril.	Sal.	Gril.
Cromarty Net - - -	–	–	–	–	2	–	48	–
Shore Mill Net - - -	–	–	4	–	25	–	52	–
Newhall Net - - -	–	–	5	–	21	–	21	–
Storehouse Net - - -	–	–	–	–	–	–	–	–
West March Net - -	–	–	–	–	–	–	–	–
Total - -	–	–	9	–	48	–	121	–
1819:								
Cromarty - - - -	–	–	–	–	33	–	64	–
Shore Mill - - - -	–	–	–	–	62	–	104	–
Newhall - - - -	–	–	–	–	52	–	110	–
Storehouse - - - -	–	–	–	–	–	–	4	–
Total - -	–	–	–	–	147	–	282	–
1820:								
Cromarty - - - -	–	–	12	–	54	–	37	–
North Ferry, Ditto - -	–	–	–	–	30	–	11	–
Total - -	–	–	12	–	84	–	48	–
1821:								
Cromarty - - - -	4	–	36	–	60	–	175	–
North Ferry - - -	–	–	3	–	11	–	36	–
Total - -	4	–	39	–	71	–	211	–
1822:								
Cromarty - - - -	7	–	14	–	12	–	23	–
North Ferry - - -	–	–	–	–	–	–	8	–
Total - -	7	–	14	–	12	–	31	–
1823:								
Cromarty - - - -	–	–	2	–	12	–	48	–
Ditto, Factory - - -	–	–	–	–	–	–	11	–
North Ferry - - -	–	–	–	–	2	–	8	–
Total - -	–	–	2	–	14	–	67	–
General Total for six Years -	11		76	–	376	–	760	–

April 25 1825.

Stake Nets at present in the Cromarty Frith.

South Side:

Cromarty Town - 1 Flood Net - J. Stevenson, tenant
- - Ditto - - - 1 Ebb Ditto - - - Ditto - - - } Ross of Cromarty Proprietor
Shore Mill of Ditto 1 Ebb and Flood - - Ditto - - -

Newhall - - - - 1 Ditto Ditto - Gordon and Taylor
Storehouse of Ditto 1 - - Ditto - - - Ditto - - } D. M'Kenzie, of Newhall.
West March - - 1 - - Ditto - - Ditto - -

Appendix, N° 14.

rom STAKE-NETS; by Jas. Taylor, from 1818 to 1823.

May.		June.		July.		August.		Total.		Total Fish.
Sal.	Gril.	Sal.	Gril.	Sal.	Gril.	Sal.	Gril.	Sal.	Gril.	—
72	–	45	1	13	56	3	48	183	105	288
141	–	69	2	15	27	6	42	312	71	383
61	–	55	3	35	134	12	93	210	230	440
43	–	33	1	9	27	3	59	88	87	175
8	–	21	–	14	25	1	10	44	35	79
325	–	223	7	86	269	25	252	837	528	1,365
85	–	116	27	159	514	172	652	629	1,193	1,822
136	–	161	43	194	290	210	371	867	704	1,571
132	–	156	13	178	308	190	379	818	700	1,518
5	–	7	3	–	–	7	3	23	6	29
358	–	440	86	531	1,112	579	1,405	2,337	2,603	4,940
18	2	26	70	13	167	3	157	163	396	559
5	1	14	14	3	11	–	–	63	26	89
23	3	40	84	16	178	3	157	226	422	648
113	1	30	31	93	423	13	92	524	547	1,071
25	–	9	7	16	32	–	–	100	39	139
138	1	39	38	109	455	13	92	624	586	1,210
67	2	44	20	23	169	13	86	203	286	489
15	–	9	6	6	12	3	8	41	26	67
82	2	53	35	29	181	16	94	244	312	556
52	3	3	10	8	110	3	52	128	175	303
16	–	5	13	6	51	3	13	41	77	118
4	–	–	–	–	–	–	–	14	–	14
72	3	8	23	14	161	6	65	183	252	435
998	9	803	273	785	2,356	642	2,065	4,451	4,703	9,154

Stake Nets at present in the Cromarty Frith—*continued.*

North Side:

igg - - - - - - 1 Ebb and Flood - James Taylor - Ja. Frazer, of Pitcargen.
vergordon - - - 2 Ditto - Ditto - J. Steavenson - R. B. E. M'Leod, of Cadboll.
almore - - - - - 1 Ditto - Ditto - - Ditto - - H. Rose, of Glastulloch.
lness - - - - - - 1 Ditto - Ditto - Teaninich - - } Himself proprietor.
alcony - - - - - 1 Ditto - - - - - Ditto - - - }

Wattled Yare:

ointsfield - - - - 1 Ditto - - - - Major Munro, of Pointsfield.
. Frazer, of Inchcoulte, 1 Ditto - - - W. Frazer.

Appendix, No. 15.

Appendix, N° 15.

Memorial and Abstract of the Proceedings respecting the Regulation of the Duke of Gordon's Cruives in the River Spey.

IN the question brought by Sir James Grant and the upper heritors on this river, they foresaw that the challenge of the Duke's right became uphill work, and therefore they were determined to have his cruives strictly regulated agreeably to the statutes.

Accordingly the Court, upon advising a Report made by Mr. Robert Turner, Sheriff-substitute of Aberdeen, who has been appointed to visit and inspect the cruives, pro-
8th August 1776. nounced the following interlocutor, of this date:—"Find that the rungs of the hecks of the cruives ought to be round, placed at the distance of three inches, and made as strong only as is necessary to resist the force of the water; and that the two posts of wood placed at each end of the heck of the present cruives ought to be taken away; and that the inscales should be fixed at the corners or extremes of the cruive-box, and made of pieces of wood of such thickness and so contrived as to allow their being easily moved, and to afford an entry to the cruives equal in wideness to the side of the cruive-box next to the sea. And they appoint the Duke of Gordon to construct his cruives in the above manner, at the sight of the before-named Mr. Robert Turner; and the Lords further find, that the cruive-boxes ought to be placed on the channel or bottom of the river, and if placed on stones, these stones to be such that the surface of them, on which the cruive-boxes are to be placed may be on a level with the bottom or channel of the river, and that the cruive boxes should be placed in the cruive-dyke so as to receive in a direct line the run of the water; and that the face of the lower side of the cruive-boxes should be placed in the dyke so as not to project beyond the face of the dyke. And the Lords appoint the cruives to be so placed, at the sight of the before-named Mr. Robert Turner, and to be kept so in time coming; and they appoint the before-named regulations, both as to the construction and situation of the cruives, to take place and be completed betwixt and the time of the cruive-fishing beginning for the next season, under the penalty of £.50 sterling, over and above performance, and to be continued thereafter under the like penalty, to be paid by the defender, his heirs and successors, transgressing or opposing these regulations, *toties quoties*, to such of the pursuers, or their heirs and successors as shall sue for the same; and decern, superseding extract till the 20th November next, under this condition, that there shall be no fishing with the cruives after the 26th day of August current, unless the cruives are regulated as directed by this interlocutor."

The Duke of Gordon brought this interlocutor under their Lordships review, and upon advising his Grace's petition with answers, this interlocutor was pronounced:

25th January 1777. "The Lords, having advised the petition for the Duke of Gordon, and answers for the upper heritors on Spey, with the replies and duplies, they find that the rungs of the hecks of the cruives must be formed in a *round or oval shape, and if in an oval, that the longest diameter must stand from the inside to the outside of the cruives*; and that they must be placed at the distance of three inches from the nearest part of the one, to the nearest part of the other next to it, and made as strong only as is necessary to resist the force of the water; that the two posts of wood, placed at each end of the heck in the inside of the cruives, must be taken away; that the inscales should be fixed at the corners or extremes of the cruive-box, and made of pieces of wood of such thickness, and so contrived as to allow their being easily moved, and to afford an entry to the cruives equal in width to the side of the cruive-box next to the sea; and that the inscales must be removed and taken out altogether during the Saturday's slap, except in time of flood, when the water is so high as to prevent their being got out, at which time only it will be sufficient to fix them back to the sides of the cruive-box; that the cruive-box must be placed, *in so far as is practicable to be done*, on the bottom or channel of the river; and if placed on stones, these stones to be so sunk that the surface of them, on which the cruive-boxes are to be placed, may be on a level with the bottom or channel of the river; and find, that the faces or lower side of the cruive-boxes must be placed in the dyke, so as not to project beyond the face of the dyke; and that the sole or under-tree of the door of the Saturday's slap must be so placed as to be no higher than the depth of a piece of wood or frame whereon to fix the end of the rungs of the said door above the sole-tree of the cruive-box; and the Lords appoint the Duke of Gordon to construct his cruives, and to place them in the manner before described, at the sight of Mr. Robert Turner, Sheriff-substitute of Aberdeenshire; and the Lords remit to the said Mr. Robert Turner to take the best information he can get, and to report his opinion to the Court, *whether the present cruives, emulously placed in parts of the dyke, are improper for the taking of fish therein, or if they can, without prejudice to the Duke of Gordon, be placed in other parts of the dyke more proper for taking of fish.*

"*And the Lords further find, that yearly, at the commencing of the fishing season, the Duke of Gordon must either put his cruives in the dyke, or must leave open the slopes where the cruives should be put. And the Lords appoint the before-mentioned regulations to take place and be completed by the time the cruive fishing for next season does begin,* under the penalty of £.50 sterling, over and above performance, and to be continued thereafter under the like penalty, to be paid by the petitioner, his heirs and successors, transgressing or opposing these regulations, *toties quoties*, to such of their respondents, or their heirs or successors, as shall sue for the same, and decern."

Sir

Sir James Grant having reclaimed in his turn: upon advising his petition, with answers for the Duke, the Court pronounced the following interlocutor: "The Lords, having advised this petition, with the answers, they adhere to their former interlocutor reclaimed against, with these additions, that they find the Saturday's slap must be observed in terms of law, every Saturday's evening from six o'clock, to Monday morning at sunrise during the whole fishing season, when the water is not in such a speat as to render the cruive-boxes totally inaccessible; and that the regulations of the cruives must take place immediately; and the Lords further remit to Mr. Robert Turner, Sheriff-substitute of Aberdeenshire, to report his opinion to the Court, Whether the cruive-boxes should be placed in the cruive dyke so as to receive in a direct line the run of the water; and with the above additions to the above interlocutor, they refer desire of the petitioner." Appendix, N° 15. 5 March 1777.

(signed) "*B. Duncan*, I. P. D."

In order to carry judgment into execution, a memorial was laid before the Duke's counsel, and the following directions were given the Duke's manager in consequence of that opinion;

"The Court, by their interlocutor of this date, found, That the rungs of the hecks of the cruives must be formed in a round or oval shape; that the longest diameter must stand from the inside to the outside of the cruives; and that they must be placed at the distance of three inches from the nearest part of the one to the nearest part of the other next to it, and made as strong only as is necessary to resist the force of the water." 25 Jan. 1777.

As this interlocutor is adhered to, and now become final, the Duke's manager in the country is desirous to know whether there are fixed and determined proportions for ascertaining an oval shape, or if the Duke is at liberty to take any length of a diameter one way, and as little the other as he pleases, providing no part of the circumference be in a straight line; and, secondly, in what way is the degree of strength of the rungs that is necessary to resist the force of the water to be fixed.

In considering these particulars the Duke's manager is desirous to avoid as much as possible every just ground of complaint in carrying into execution the regulations enjoined by the Court, which have already occasioned more litigation than could have been expected.

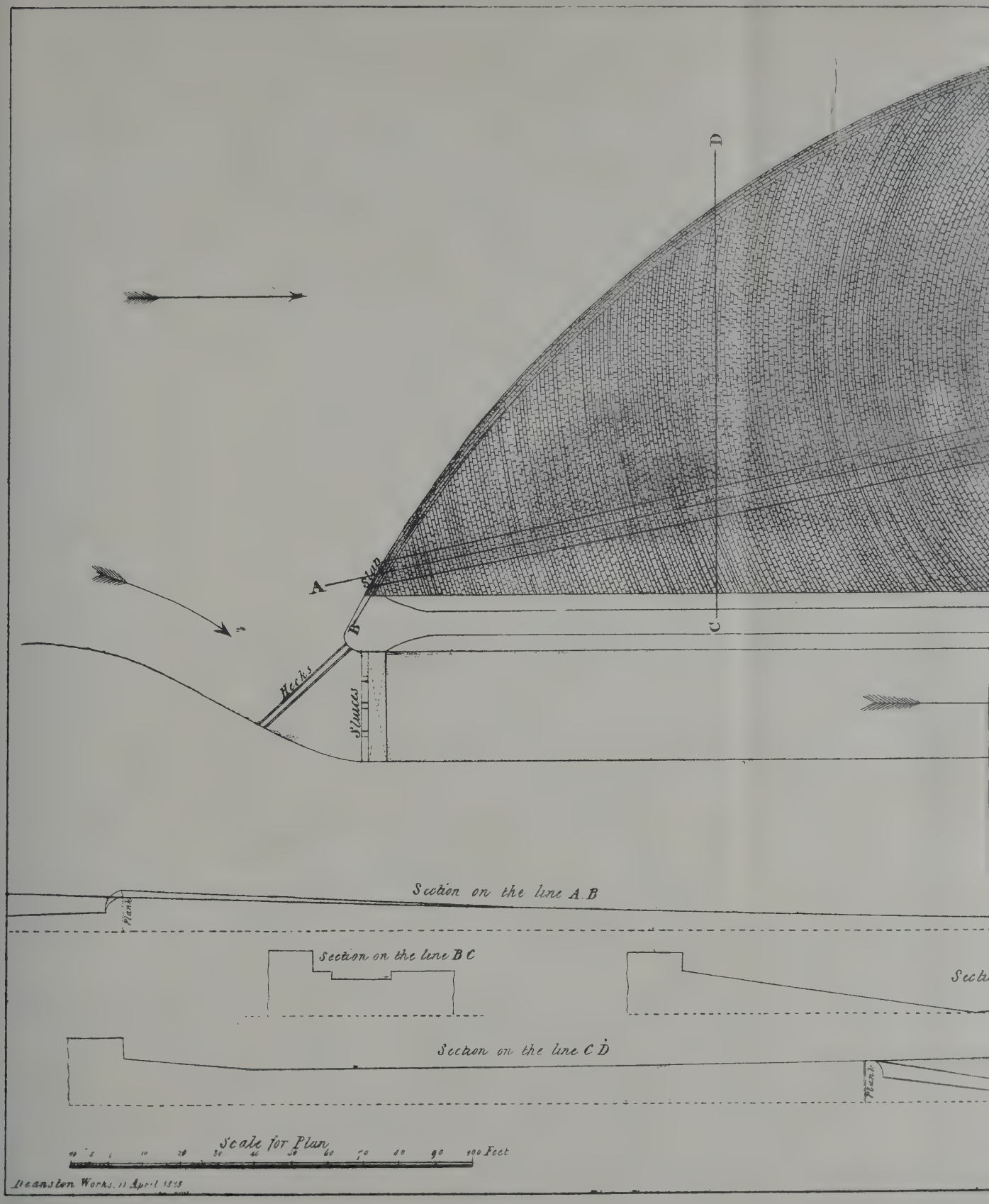
In this view, therefore, it is humbly submitted, if the interlocutor itself does not contain plain and clear directions for the shape and position of the rungs. An oval shape every artificer well knows, and the name itself is sufficiently descriptive of the figure enjoined. In short, the rungs must be of a complete oval form, properly dressed in that shape, and no evasion attempted by merely rounding off the angles of the oblong spokes. The interlocutor specially fixes that the longest diameter shall stand from the inside to the outside of the cruives, which must no doubt apply to the depth of the rungs forming the passage from the inside to the outside, and not to the breadth, upon which the water strikes on the outside of the cruives.

2nd. The length of these diameters will depend upon the size of the rungs, which the interlocutor declares must not exceed that degree of strength that is necessary to resist the force of the water. This, indeed, can only be ascertained by those who have made the experiment; but in general it may (safely) be observed, that the Duke can safely construct his spokes of the same dimensions with those on the Forth, which are four and a half inches deep, and two and a quarter broad; or as the river Spey is known to be a much more rapid and impetuous river, the size of the new spokes may be increased in diameter at least equal to, and even a degree exceeding, those which Mr. Turner found at his former inspection had been forced out of their places by the impetuosity of the river. These being still, no doubt, preserved, will enable Mr. Turner to form an opinion of the size requisite, and to report that fact with precision, at placing the new rungs. The river having shifted its course by the speats of last winter, a new cruive-dyke may become necessary in a different position from the former; and as the Duke has been in use to vary his dyke according to the shifting of the river, it is humbly thought he should accordingly proceed in building his new dyke as he finds most suitable, without regarding any remonstrance or protest from the opposite party. Nor is it necessary that his Grace should even lay himself under the restriction of consulting the opinion of Mr. Turner, the inspector, as this makes no part of the remit from the Court.

We agree in the above directions,

(Signed) *Dav. Rae,*
Jo. Mac Lauren,
Alexr. Murray.

Edinburgh, 8th March 1777.


D
C
A
Sluice
B
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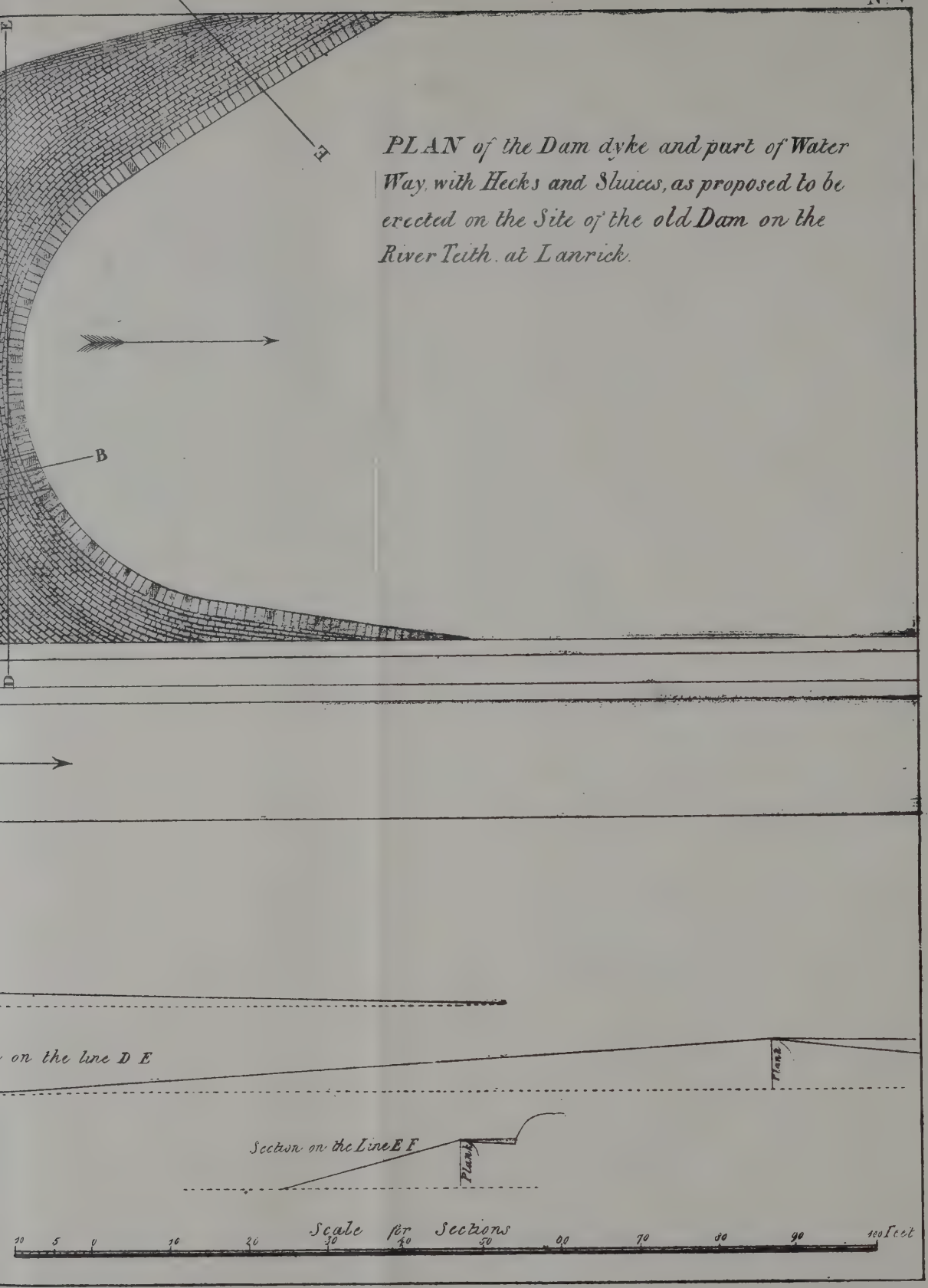
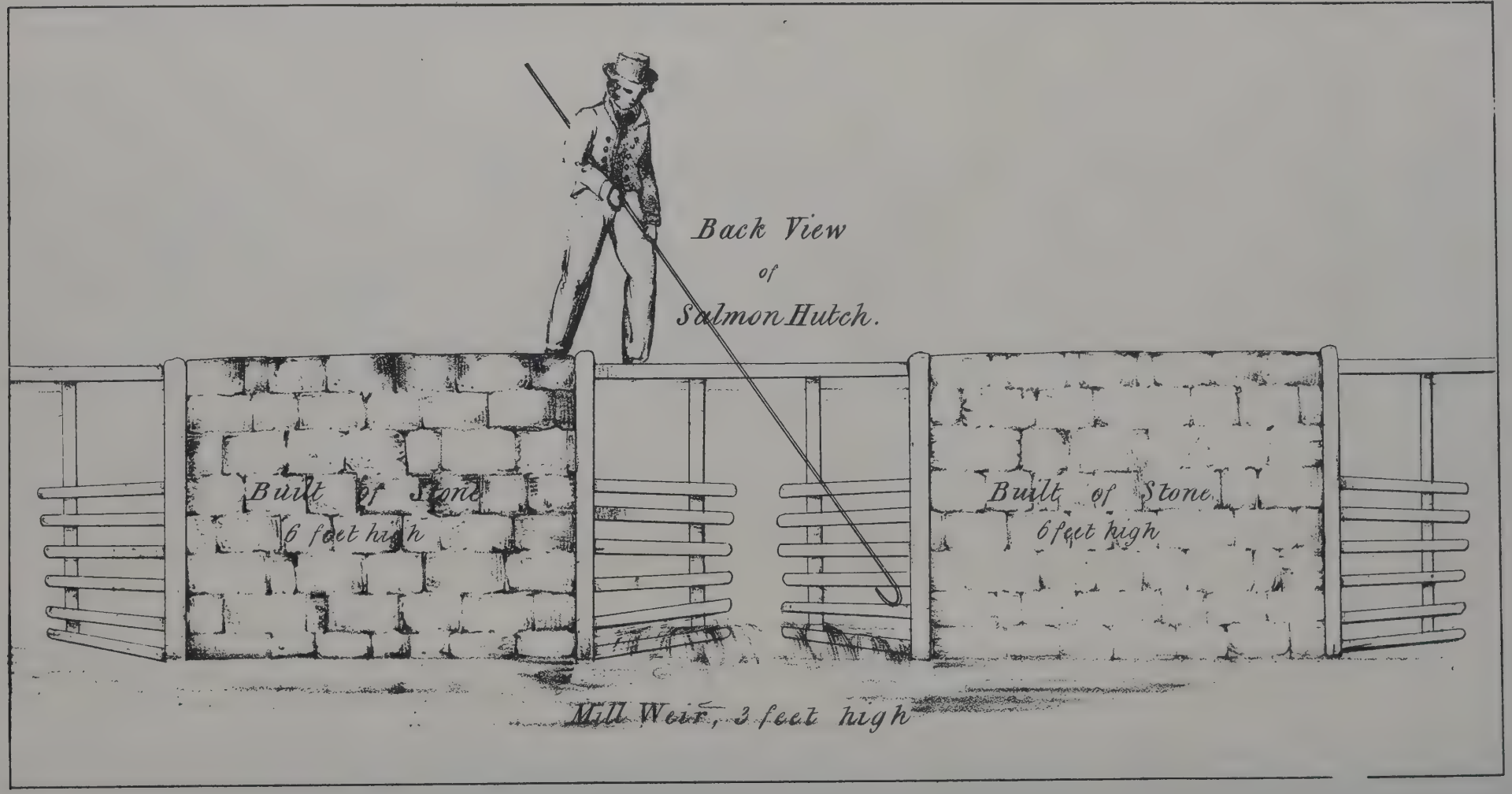
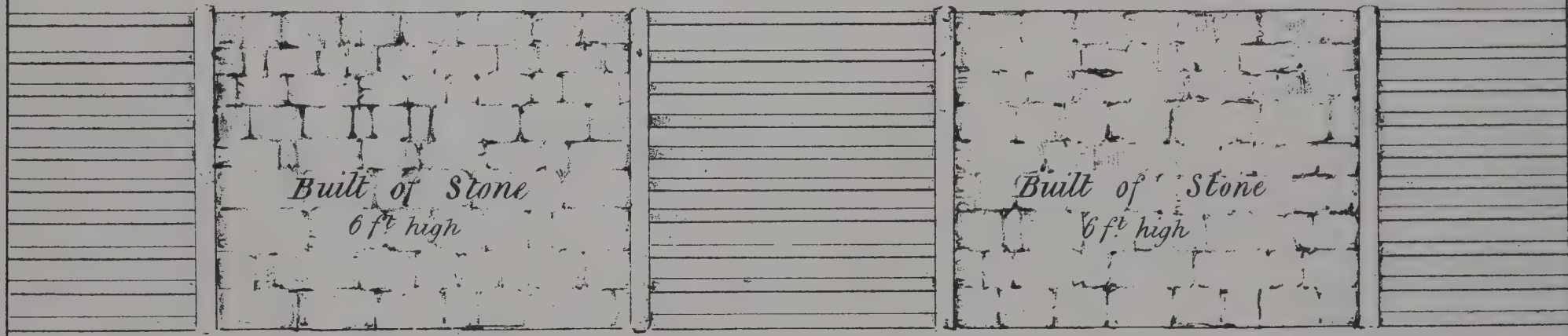
Sluices
Section on the line A B
Plank
Section on the line B C
Section on the line C D
Plank
Scale for Plan
Feet
Deanston Works. 11 April 1835

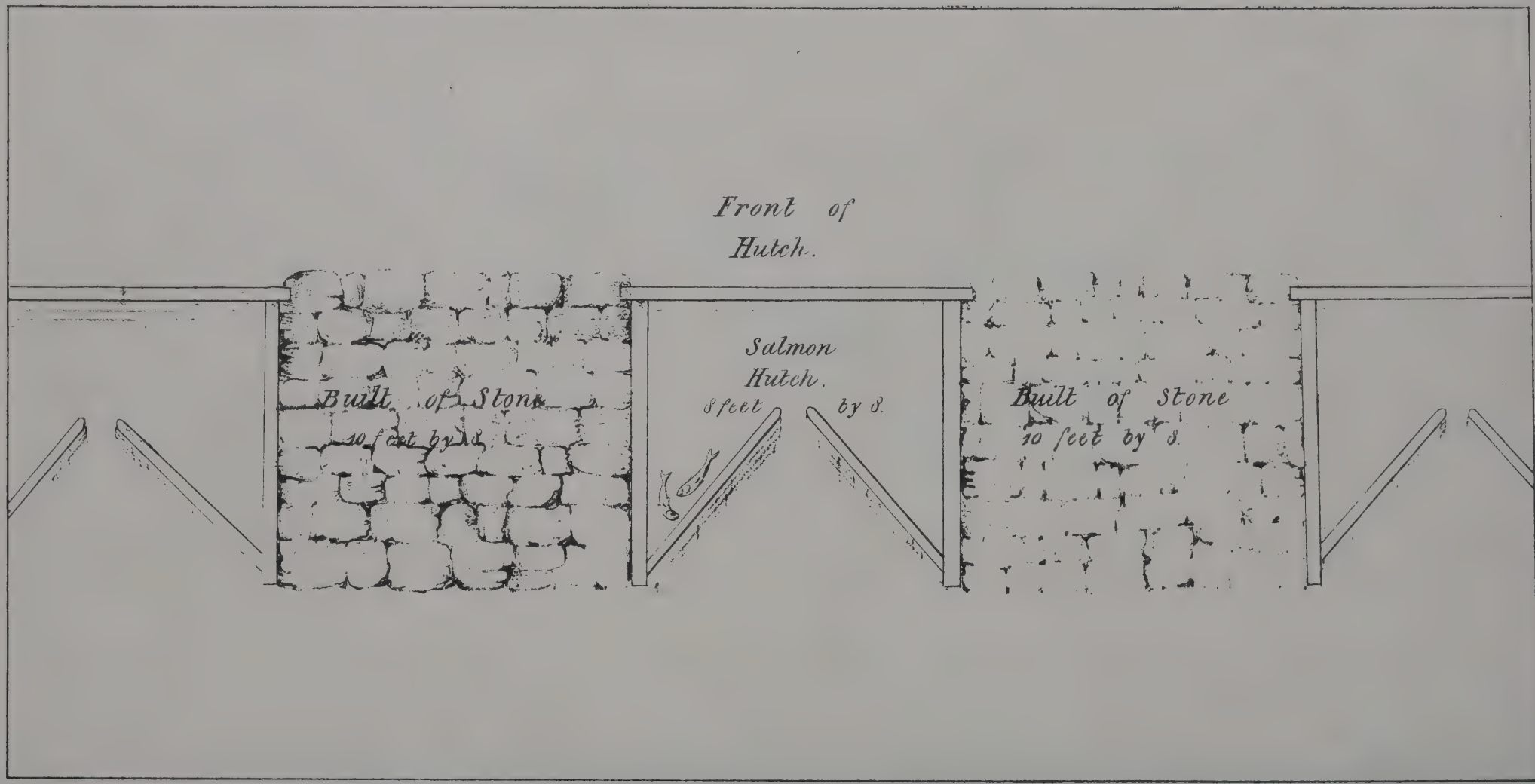


PLAN of the Dam dyke and part of Water Way, with Hecks and Sluices, as proposed to be erected on the Site of the old Dam on the River Teith. at Lanrick.

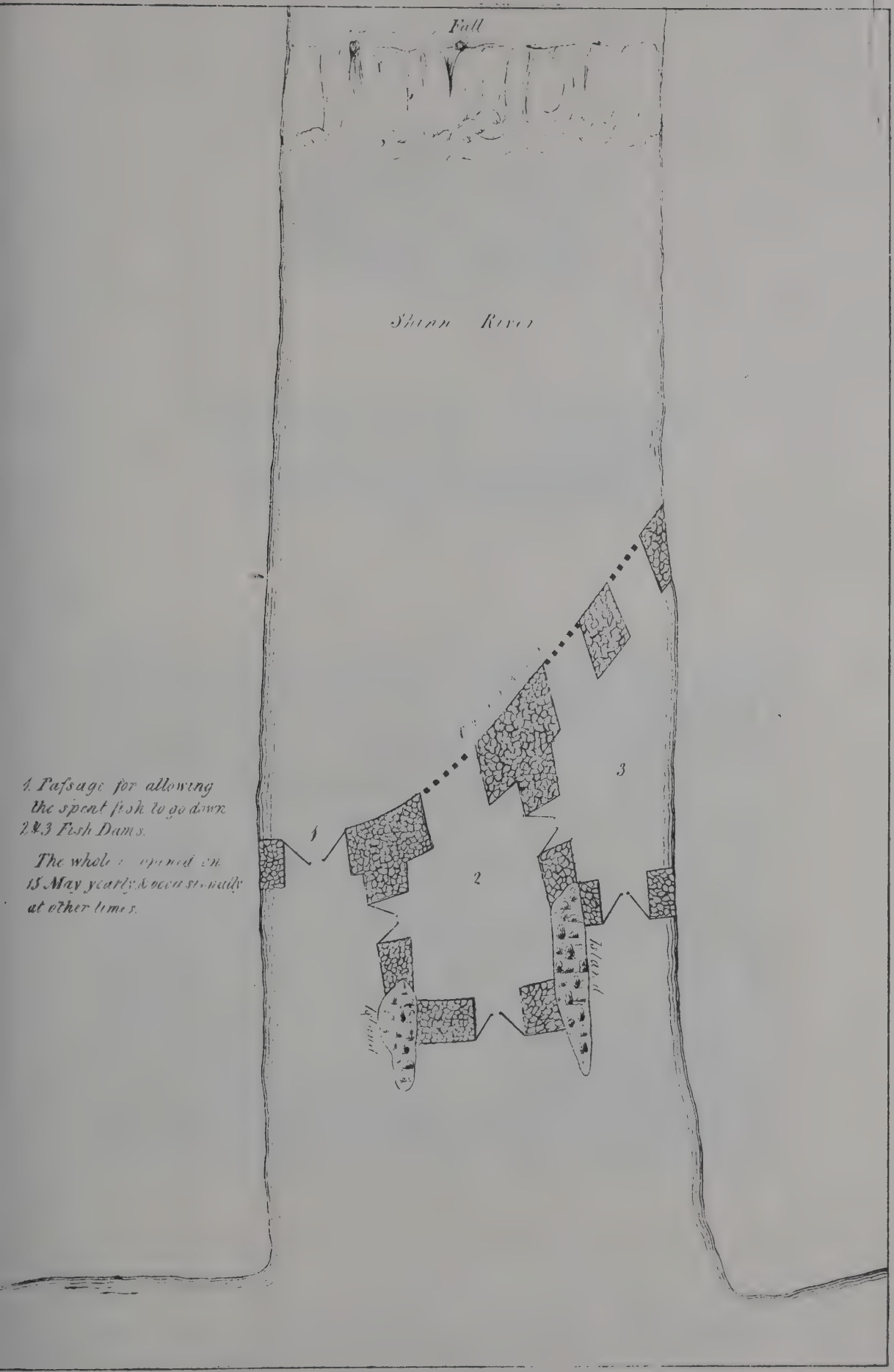

Back View
of
Salmon Hutch.
Built of Stone
6 feet high
Built of Stone
6 feet high
Mill Weir, 3 feet high

Front View
of
Salmon Hutch




Front of
Hutch.
Built of Stone
10 feet by 8.
Salmon
Hutch.
8 feet by 8.
Built of Stone
10 feet by 8.

SALMON FISHERY 1825. N°IX

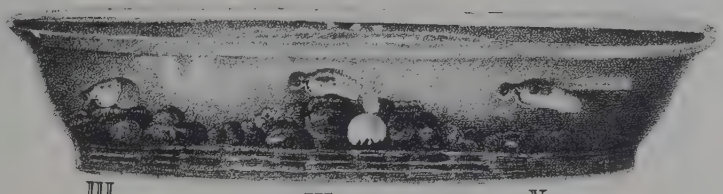


1. Passage for allowing the spent fish to go down
2 & 3 Fish Dams.

The whole opened on 15 May yearly & every Sunday at other times.

Progress of the Spawn of Salmon.

I. II.



III. IV. V.

VI.

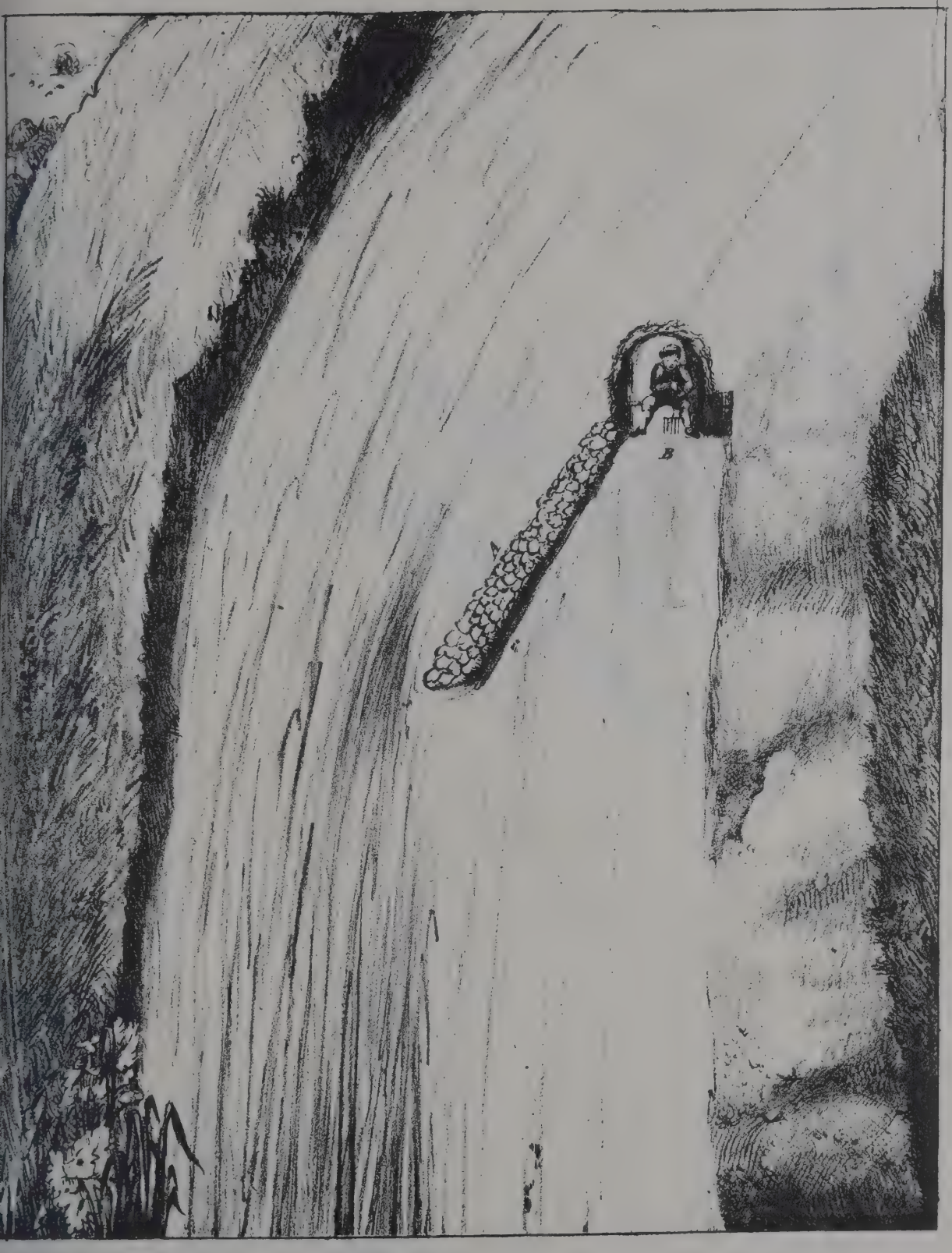
VII.

VIII.

James Basire sculpt
Luke Hansard & Sons Printers.

393. Ordered by the HOUSE OF COMMONS, to be Printed, 3rd June, 1825.

Stream Fishing as practised on the River Spey. **No. XI**



Description of the Above.

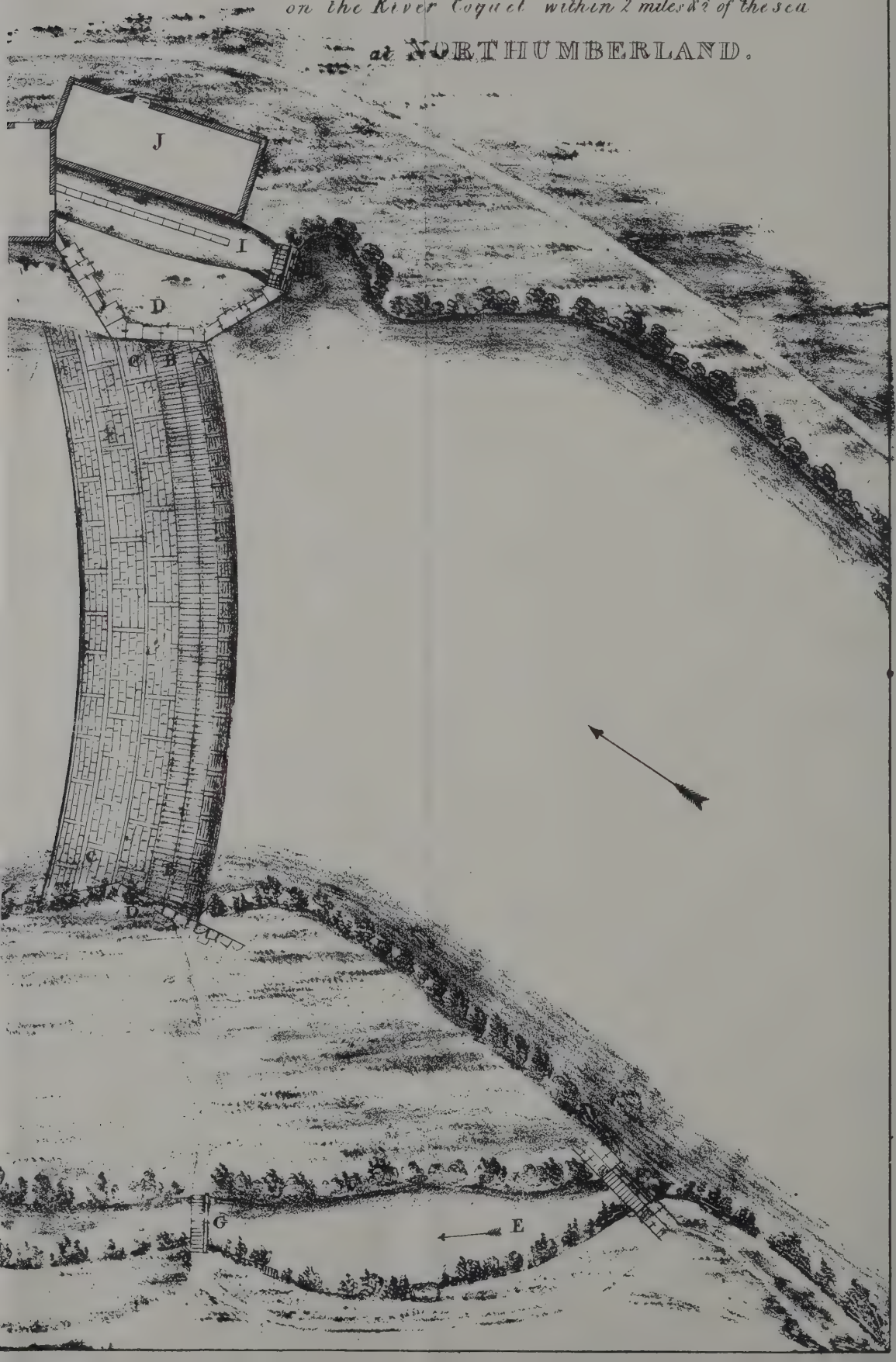
A. Represents a dike constructed of loose stones which intercepts the fish coming up the River and turns them towards

B where there is an opening, above this opening there is a Hut constructed with branches of trees in which the fisherman sits who strikes the fish as they attempt to pass, with a five-pronged instrument.

K
K
K
I
J

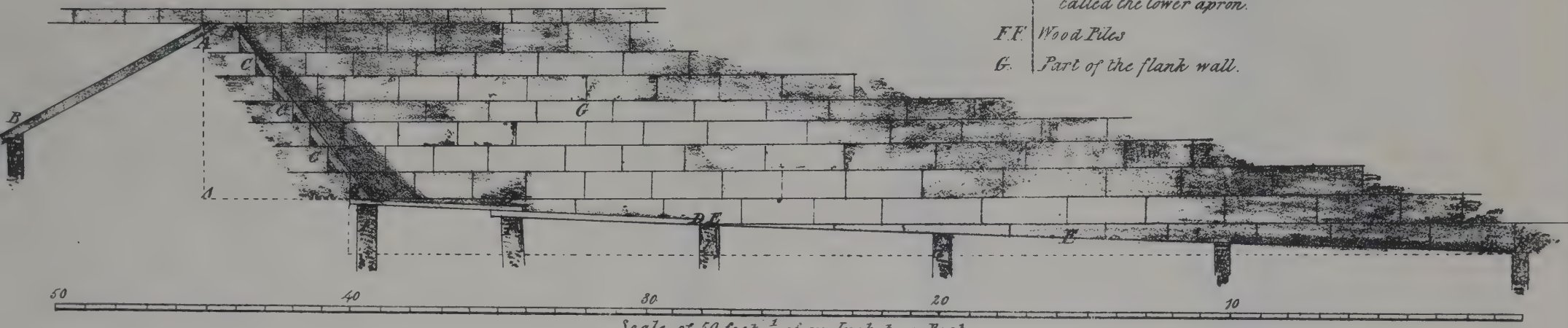
A PLAN of the WEIR at WARKWORTH MILLS

on the River Coquet within 2 miles of the sea at NORTHUMBERLAND.



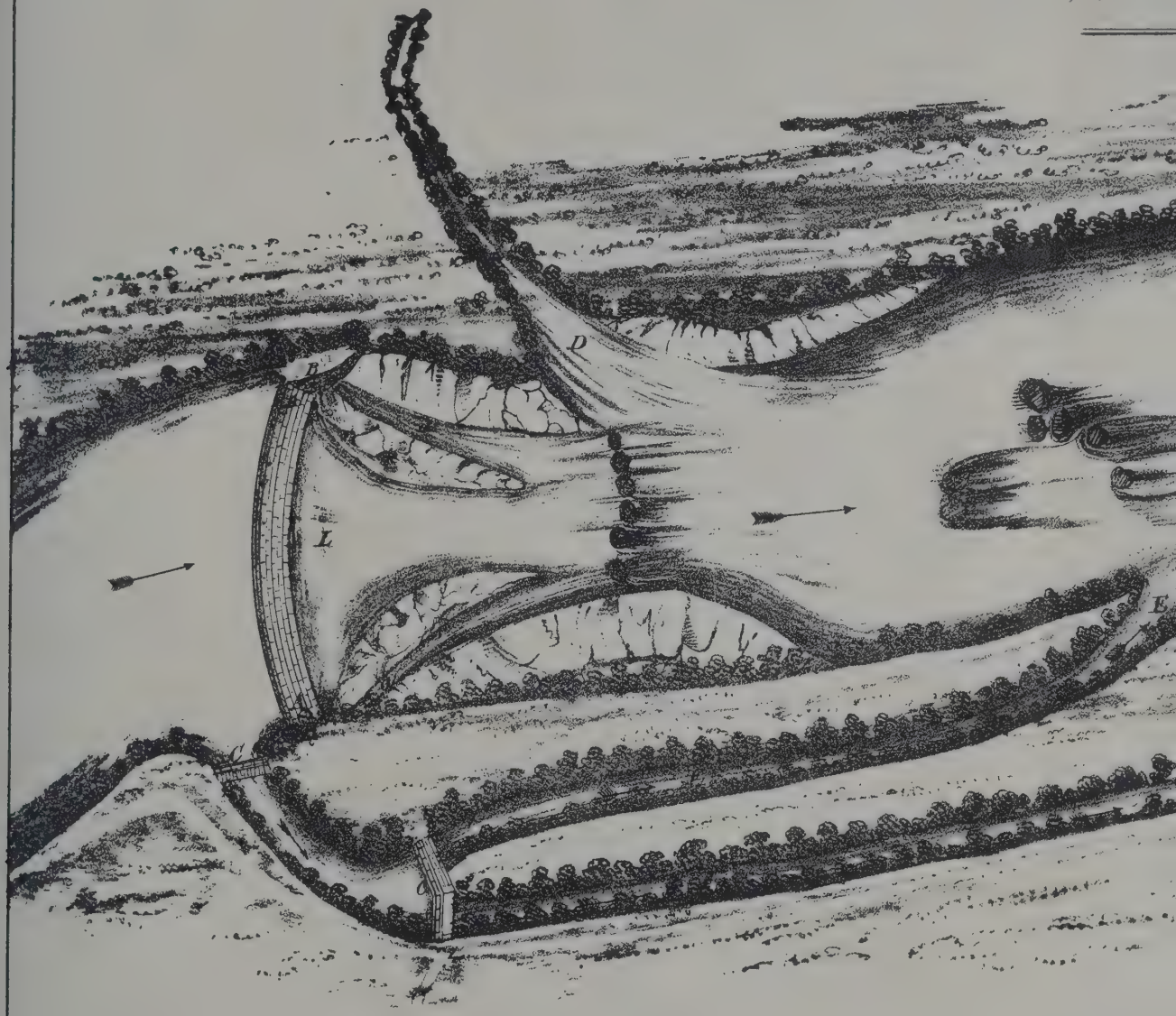
A SECTION of Warkworth Mill Weir and flank Wall in part.

AA	The perpendicular height of the Weir is about 6 feet
BB	Struts or Stays to the Crown tree
CC	Projecting stones or Water-breakers
DD	Wood plank commonly called the upper apron
EE	Wood Framing packed with square stones, commonly called the lower apron.
FF	Wood Piles
G.	Part of the flank wall.



Scale of 50 feet $\frac{1}{4}$ of an Inch to a Foot

PLAN of t
on th
RIVER COQUET at A
near Felton, in N

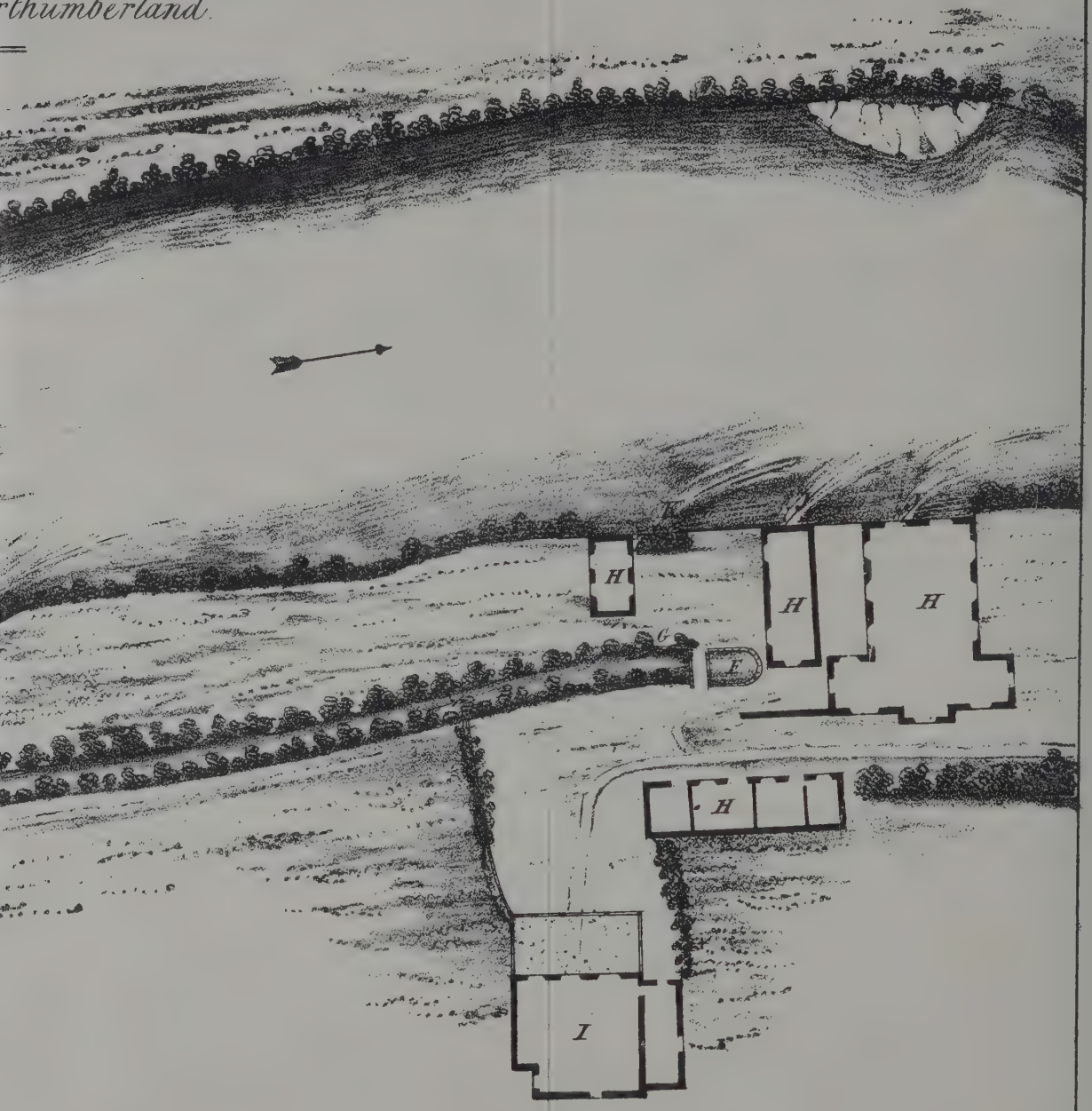


I

e WEIR ,

KLINGTON PARK

rthumberland.



SALMON FISHERIES.

MINUTES OF EVIDENCE

TAKEN BEFORE THE COMMITTEE ON THE

B I L L

For the more effectual Preservation and Increase of the Breed of Salmon, and for regulating the Salmon Fisheries, throughout *Great Britain* and *Ireland*.

Ordered, by The House of Commons, *to be Printed,*
31 *May* 1827.

WITNESSES.

Lunæ, 21° die Maij, 1827.

Mr. *Robert Buist* - - - - - - - - - p. 3

Mr. *Henry Goter* - - - - - - - - - 9

Mr. *George Sheppard* - - - - - - - - 11

Martis, 22° die Maij, 1827.

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Lunæ, 28° die Maij, 1827.

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House of Commons.

Committee on Salmon Fisheries Bill.

MINUTES OF EVIDENCE

Lunæ, 21° *die Maij*, 1827.

THOMAS FRANCIS KENNNEDY, ESQUIRE,

IN THE CHAIR.

Mr. *Robert Buist*, called in; and Examined by Mr. *Keay*, on behalf of the Proprietors and Tacksmen of the Tay Fisheries.

Mr. *Robert Buist.*

12 May 1827.

HAVE you had occasion to be acquainted with the management of the fisheries in the Tay?—Yes.

In what capacity?—I am managing partner of the principal fishing company in the river Tay; our company also had a share of the fishing in the estuary of the Tay, and on the sea coast between the mouth of the Tay and Montrose.

How long have you been in that situation?—In the river eighteen years, and in the estuary seven years, after the removal of the stake nets.

Was your partner managing clerk of that?—Yes.

In your capacity of managing partner, did you keep the books containing the returns of the number of fish caught?—Yes.

Are you in possession of any of those books, or abstracts from them?—I am.

At what time does the fishing season in the Tay terminate, and when does it commence?—It terminates the 26th of August, and begins the 10th of December.

Is the fishery very productive immediately after the opening in the beginning of December?—In December and January it is not productive; it just a little more than pays the wages.

Does it become more productive during the month of February?—It does.

Can you give the Committee any statement which will show what is the average production of the river during those months?—I beg to explain, that I speak not only of our own fisheries, but also of all the fisheries of the Tay.

What are your other means of knowledge?—As trustee for the other company's estate.

Did that company become bankrupt?—Yes, and I had their books.

Were the fisheries occupied by those two companies, the principal fisheries on the river?—The whole of the principal fisheries in the early months.

Will you state to the Committee the result of that examination?—The value of the fish taken in December and January is 650*l.* upon the average of seven years; the wages and expenses, during those months, about 450*l.*; leaving, for rent, 200*l.*; and in February the produce is 1,015*l.* and the wages and expenses about 315*l.*; leaving, for rent, 700*l.* in that month: and I may also state here, that I have the books before me, if any gentleman wishes to see the particular number of fish. But at the same time I may say, that the fish during those months are larger and better in quality than in March and April following; the fish fall off in size.

Do they fetch a higher price in the market per pound, independently of their size?—Yes, much higher.

Does your return exhibit any return as to the number of foul fishes caught in your net during those months?—No; that return it is impossible to get, because we prohibit our men strictly from taking them.

Mr. *Robert Buist.*

21 May 1827.

Does it consist with your knowledge whether they do take them, or whether there are many foul fish in the nets, and afterwards thrown in?—In the months of January and February there are foul fish in the river, and some unspawned even in the month of December.

And it is, of course, impossible to avoid catching those fish, though you may throw them in again?—You cannot avoid it.

Does the number of those foul fish diminish in February?—Very much.

Have you known one unspawned fish caught in February?—No, not of my own knowledge.

But you have heard of unspawned fishes during January?—Yes; I can mention to the Committee one in particular, and that was the latest instance I know of. On the 4th of January, in the year 1825, a female salmon, apparently ready to spawn, was caught in the Tay, a little below Perth, and the peas of the roe were about the size of ordinary field peas, and on being counted, the peas of the fish was found to have contained 18,130; the fish weighed sixteen pounds, and the roe four and a half; and we reckon that rare.

Even in January?—Yes.

But unknown in February?—Yes, to my knowledge.

Although there are no unspawned fish caught in February, do you often meet with foul fishes on their descent after having spawned?—We do in February, and more chiefly in April; the female fish go down with the fry in April.

Is there any month in the year during which a foul fish in its descent has not been found?—After the month of April I never saw one.

From your experience as a fisherman in the Tay, what would you conceive to be the proper time for close time in the river, with a view to the permanent advantage to the fisheries?—I think, with all the advantage we have by beginning so early as the 10th of December, that were the fishing not to open till the middle of January or the beginning of February it would save more fish than would compensate for the loss of the good ones.

You think that the owners of fisheries would be benefited by postponing the time till the beginning of February?—Yes, I think so, speaking generally.

Do you consider they would sacrifice their own interest by keeping the river shut longer than the first of February?—Yes, most certainly.

Can you state what the loss of any one individual would be, for instance Lord Grey, the principal proprietor of the fisheries, during the month of February?—Lord Grey, who is the principal proprietor in the Tay, his fisheries in December and January average about £. 126. the produce upon an average of seven years, the wages and expenses about seventy.

But you think he would do well to sacrifice that to secure the permanent advantage of the fisheries?—Yes, I think his lordship would be a great gainer by it.

(*Committee.*)—Is that your individual opinion, or are you authorized to state it?—I am not authorized to state it; but as Lord Grey's tenant I should be very well pleased to do it.

(Mr. *Keay.*)—Can you give a statement of each year?—In February Lord Grey's fishing, for the last seven years, averaged about 220 fish; the value of those fish, taken from our returns in London, is £. 312.; his wages and expenses were £. 78.; that would make a loss to his lordship, if that month was taken away from him, of £. 234.

Do you think that the loss during that month would be compensated by any advantage in the more productive nature of the fishery in other months?—No.

Are you acquainted with any other river besides the Tay?—Yes, we have fisheries in the South Esk.

That is at Montrose?—Yes.

Do you conceive that the close time in all rivers in Scotland should be the same?—Most certainly not.

Do you mean to say that the rivers differ as to the coming of the fish?—Yes, certainly.

Do they come sooner to the northern rivers than to the southern?—No; I mean to state, that in the Tay we have very fine fish in December and January, and in the Esk they do not begin till the beginning of February; the Tay fish, after the end of August, fall greatly off, while the Esk fish are good till the beginning of October.

You mean to say that the Esk is later than the Tay?—Yes.

The fish do not come into good condition so soon, and do not fall off so soon?—Exactly.

Mr. *Robert Buist.*

21 May 1827.

As the law stands at present, is the close time in both the same?—No.

What is the close time in the Esk?—From the 1st or 2d of February to the 10th of October.

Do you know any other river besides the Esk and the Tay?—Not of my own knowledge; only from returns from London.

Are those in your own books?—No; but we have the means of knowing what they are doing; we have returns from all the rivers in Scotland, which the factors in London send us weekly.

Do you know those to be general returns made up?—Yes, and I can vouch for their accuracy.

Is the Tweed later than the Esk?—Later than the Tay, but about the same as the Esk.

How does the law stand as to the close time in the Tweed?—I am not exactly certain as to the time it opens, but it shuts the 10th of October.

That is to say, it is two months later than the Tay in shutting?—Yes.

Cross-examined by Mr. *Rolfe.*

How far below Perth is this fishery?—Ten miles.

Does the tide come up to that part of the river?—Yes, it does.

Are you acquainted with the fisheries higher up the river?—I am.

Do you not know that the spawn is all or principally deposited much higher up the river than the part of the fisheries you are now speaking of?—I do; higher than where the tide will flow.

Then the spawn is principally deposited much higher up the river?—Yes, much higher than Perth.

And much higher than the fisheries you are speaking of, which is ten miles below Perth?—Yes, than this one, but we have one eight miles above Perth.

But the fisheries you have been speaking of are the fisheries below Perth?—I do not mean to be so understood, for we have fisheries eight miles above, and we fish there during the same time.

At what time is it that the roe first begins to be converted into a living creature?—About the month of January; I have seen them alive in the month of January.

Do you mean you have seen it as a solitary and extraordinary circumstance, or that you have generally seen them?—It is rather rare, it is not solitary.

Tell me when, generally speaking, they first begin to come into existence?—Perhaps about February they will be alive, but they are a pretty large size in March and the beginning of April.

Then, as a general principle, you take it that the months of March and April will be a fair representation of the time when the fry begin to be alive?—I do not know; it is much higher up the river than where I have access to make observations that the fry come into existence; the only thing I can speak to is this, that I see them coming down in the month of March and the beginning of April about the size of a man's finger, but when they come into existence I cannot say.

How long do they continue to be coming down that size?—It depends upon the state of the river; if we have floods, they are carried out much sooner, but in an ordinary season, they all disappear about the beginning of May.

And not till the month of May, generally speaking?—No.

Will you just explain to the Committee a little as to the means or the manner in which the fry come into existence; just explain to the Committee, is the spawn deposited by the fish under the gravel?—Yes.

After it has been so deposited, in process of time does the spawn begin to break, and a part of the fish to emerge from it?—From my own observation, I cannot say, because in our fishing grounds, there are no spawning beds.

You do not know, from your own observation, the way in which the spawn are converted into fish?—No.

You have said, you think it might be expedient, that the fishing season should not commence till the 1st of February?—The middle of January, or the 1st of February.

Are you speaking with reference to the fisheries at this point below Perth?—I am speaking of the fisheries both below and above Perth.

You think it makes no difference whether you are speaking of the fisheries five miles below or eight miles above?—Not the least.

You think it would be equally expedient to begin the middle of January or February, as well eight miles above Perth as five miles below it?—Yes.

Mr. *Robert Buist.*

21 May 1827.

Might you not be in danger of injuring the spawning beds above Perth, by beginning so early?—I think the fish deposit their spawn in the smaller rivers, but from Stoke Hall, the seat of Lord Gwydir, downwards, those are the most productive fishings, during the early months.

In that part of the Tay, when the spawn is deposited, do you think it would be expedient to begin the fishing so soon?—As for that I do not know any injury it can possibly do.

Do you state to the Committee, as your opinion, that fishing, even on a spawning bed, does no harm in January and early in February?—From my own knowledge, I cannot say to that, for I never saw it tried.

You do not give any opinion upon it?—No; but I beg it to be understood, that from the nature of the rope we employ, I do not see how they can disturb the gravel, we have no weights.

With regard to the common net and coble?—I beg to explain, that in the whole of the Tay, excepting a part belonging to Lord Gwydir, there are no weights used at all, we never use any in the fresh water, we do in the salt.

Is that common?—Except in that fishing belonging to Lord Gwydir, at Lynn Campsey, where the water comes over a rock, I do not know any single station in the river Tay, where weights are attached to nets, that is metal weights.

If there is no weight, why does any part of the net go to the bottom, and another part stay at the top?—It is a large rope twisted at the bottom of the net, the upper part is buoyed up by corks.

There is something attached to the net, sufficient to sink it to the bottom of the stream?—Yes.

Is not that necessary, in order to catch the fish?—Certainly; but it moves easily over the gravel.

Whatever the substance is that sinks to the bottom, is it not necessary that that substance should be dragged along the surface of the river?—It comes very close to it; I do not know that in every instance it drags along the gravel.

In ninety-nine cases out of one hundred, does not it drag along the gravel?—I have not made actual observation, but it is intended to sink the net.

Is it not intended to drag along the gravel?—Yes, so far; but the weight is comparatively light.

There is some weight of hemp, or something else to sink it to the bottom; the intention is to drag it along the bottom?—As to that expression, drag along the bottom, I cannot say.

Is it not the fact?—I do not think that the weight of that rope would stir the gravel.

Whatever it is, is it not intended to be dragged along the bottom?—Yes.

(*Committee.*)—Along the centre of the stream, not the shoals?—It is dragged out on the sides.

(Mr. *Rolfe.*)—From your knowledge of the nature of spawning, do you conceive that the dragging this net over the spawning bed is likely to do injury in January?—From not having seen it drawn over spawning beds, I cannot say.

When you say no weights are used in the river Tay, do you mean to represent that as a general system over Scotland?—I cannot say over Scotland, but in the estuary, where the nets are stationary, there they attach heavy cast-metal weights at the bottom.

You are acquainted with the fishing in the estuary of the Tay, and higher up?—Yes.

And in the estuary there are weights?—Yes.

Whether there are weights in the other rivers in Scotland you do not know?—I do not.

In point of fact, are there not a great many unclean fish taken during the month of January, though they may be thrown back again?—There are in January.

Did you ever know instances when they are not thrown back again; when the fishermen keep them?—I never knew any of our men to do it in the last five or six years back; because we make a bargain with them, that if they are known to kill a fish in that situation they are turned off directly.

Is it so every where?—I do not know.

What is the principle on which you would solve this phenomenon, that the fish are better in February than in March or April?—It proceeds from a natural cause; I cannot

Mr. *Robert Buist.*

21 May 1827.

I cannot explain, but I can prove that we get higher prices for them; and I asked one of our salesmen to be in attendance to-day to speak to the quality of the salmon.

You have not observed the quality yourself?—Yes, I have.

Superiority of price may arise from scarcity?—They are heavier fish.

Have you no means of suggesting an explanation of that?—No, unless it be that the late fish come round the coast, and come at that early period, while the fish of the last year may go down and come up again.

May not those fish in February be a few straggling fish a year older than the others in the natural supply?—Yes.

(*Committee.*)—You state that the weights are not used in the river; does it remain with the fishermen to use the weights, or is there any thing to prevent it?—I do not think there is any thing to prevent it.

(Mr. *Keay.*)—You say you have had the management of the fisheries five miles below, and eight above Perth?—Yes.

Are those the most valuable fisheries in the river?—Yes.

Can you give the Committee any idea of the value of those fisheries; does it amount to £. 10,000.?—To £. 12,000.

Have you any knowledge of the rental of the fisheries further up; can you give the Committee any idea of the comparative value?—If any, there are very trifling above where we have fishing about the Duke of Athol's property and Sir Alexander M'Kenzie's; they are very trifling.

Then do you conceive, from the rent paid for those fisheries above, there is any thing like industrious fishing?—No.

Do you mean to say, it is in those higher fisheries that the spawning beds are to be found?—Yes.

And that they are not fished?—They are very carefully fished at first.

Would they pay for fishing?—Certainly not.

(*Committee.*)—If the fisheries in the neighbourhood of Perth were less industriously fished, would the fisheries higher up be considerably more valuable?—I cannot speak to that of my own knowledge; we fish as industriously as we can from the beginning, I speak from that.

If you did not catch so many salmon in the neighbourhood of Perth, would not those salmon, to a certain extent, go up and stock the higher fisheries?—They would certainly go higher up.

If the salmon were caught below, there would be fewer for you to catch?—Yes, the further up they go, the fish are not in so good condition.

(Mr. *Keay.*)—You say, in the draught nets you use, you have no artificial means of sinking the nets?—Only a heavy rope.

What is the effect of that rope passing over a bank; if you were to use a weight, do you suppose it would drag the rougher parts of the river at all?—As to the effect of the rope, I have seen it dragged over gravel, but I never saw it stir gravel. I have seen it bring out a stone as big as your hat, if it lies detached, but never to muddy the water.

You abstain from using the weight from convenience?—Yes.

Could you use the weights at all?—The water goes so rapidly, the net would not follow the stream; it would get entangled, and not follow the stream.

(*Committee.*)—Are there any spawning beds upon that part of the river under your direction?—Very few; the last spawning season was very peculiar; the river was very small, and the fish appeared not to have got up to the higher river, and a number of fish spawn under the bridge of Perth; we observe some spawning round about the bridge of Perth.

Did you ever know it happen before?—I have heard of it, but never observed it myself.

In ordinary years, in ordinary seasons, there are very few, if any, spawning beds in that part of the river under your direction?—Very few.

Do you refer to the upper part, as well as the lower part?—Yes, eight miles above Perth, and ten miles below.

How far does the tide go?—About half a mile above Perth, right up to the palace of Scone.

What sort of a bottom is in the estuary you speak of?—Sand and gravel.

Mr. *Robert Buist.*

21 May 1827.

Not rocky?—No.

You have said, that the further up a fish is carried, the worse its condition?—Yes.

It is in its best condition in the sea?—As to that, I beg to explain that the fish, I have reason to believe, from my own observation, and the register I have kept, that the fish in our fisheries are caught within a day or two of the sea; the principal catches we have are within twenty-four hours after leaving the sea.

That is the time when the fishing is best?—Solitary fish may get up there, and lie a month in the pool, where it gets poorer, but 49-50ths of the fish caught in the Tay are killed in the principal fisheries below where they are taken, immediately after leaving the sea.

What is the proportion of foul fish you have in the month of January and February?—I have no reason to know, and since the investigation before this House, we have wished to have information collected, and we have told our men to take out some few fish, and wire them, but we have not got any satisfactory information yet.

You throw all the foul fish back again?—Yes.

Whether before spawning, or after?—Yes.

Are you able to throw back the foul fish into the water without their suffering any injury?—Yes.

Do you mean, that none of those taken in the net are injured?—I do not know an instance of any being caught dead in the river; they are pulled out of the net and just thrown in.

Do you not conceive the proprietor considers himself as having a very great interest in avoiding the taking of foul fish?—Most certainly.

Would the multiplication of fish be injured by such practice?—Yes; certainly.

How is it you are enabled to determine the proportion that forty-nine out of fifty are taken before they reach those pools?—Upon my own observation of the many many thousands I have seen, I have not seen one in fifty that you could say had fallen off by laying in fresh water; that is the only way to ascertain.

What time do you think the fishing ought to close, supposing it was to commence the beginning of February?—I think nature has pointed out the first of September for the Tay, as I have seen the fish fall off so immediately upon that time.

Can you state the different prices of fish in season caught in January and February, compared with fish caught in March?—The fish that we get in February, taking one year with another, average about 30*s.* a piece, from 2*s.* 6*d.* to 3*s.* a pound.

What is it in March?—In March we have from 1*s.* 6*d.* to 2*s.* and so on to May, when they fall down to 1*s.* or 1*s.* 6*d.*

If the fishery commenced on the first of February, would not the fishermen catch a good many of the fry?—No; it is impossible for them to take fry unless they are grossly careless; the mesh of the net is seven inches round,

Do you know whether they are taken or not, in point of fact?—They are not taken.

You stated there were foul fish taken in February?—Yes; and in April too.

Do any different species of fish enter the Tay in different seasons?—I observe in February the fish are larger than in March or April; in the beginning of June a large kind of fish come in with the young ones.

Are they of a different kind from the first?—It appears to be the same species, but a larger kind of fish.

Does it appear that they were in season at a different part of the year from the others?—Wherever the fish are larger they are just as good at any part of the year.

Is it on the shallows, or the pools, you chiefly fish by net and coble?—At both.

Then they fish in the month of February and March upon the shallows, as well as in the pools?—They do.

By fishing in the shallows, do they not endanger the injuring of the spawn?—Yes, if there was spawn in the shallows they might; but in those shallows the water runs so sharp over them, that it is scarcely possible to touch the gravel.

Do you mean that they never injure the spawn by dragging the net over the shallows?—I never saw any spawn injured by fishing over the gravel.

Is it not, generally, the object of the fishermen to avoid touching the gravel?—Yes; and that is the reason the weight is so light.

How many per cent of the salmon taken in the month of February are foul fish?—That is impossible to tell; because the men take them out and throw them in again directly; they may be the same fish taken twice.

Mr. *Robert Buist.*

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Do you mean to say there are as many per cent of foul fish taken in April as there are in February?—As to the total number I cannot say, but I have seen a good many female fish that the fishermen suppose came down with the spawn and beginning to recover from a state of exhaustion.

Do you mean to say there are as many per cent foul fish taken in April as in February?—I think there are.

By taken is meant caught in the net, whether they are returned into the river or not?—Yes, as many make their appearance.

When you say foul fish, do you mean fish that have spawned or fish that have not?—Fish that have not.

What is the per centage of fish that have not spawned in February and April, is it as great in April as in February?—So far as my own observation goes, and asking for information, there is scarcely any fish in spawn taken in February, they are all spawned by that time in the Tay.

Do the fishermen invariably return the foul fish into the water that are caught in the net?—So far as comes to our knowledge they do; because they are tied down in articles, that if they are found to kill a single foul fish knowingly, they are turned out of the employment.

What precaution do you take to ensure that the fishermen do throw in the foul fish?—There is a principle of subordination, there is a man that has the charge of five or ten men; then we have a man that overlooks from forty to fifty men, and those are responsible that our orders are obeyed.

Do you say that the male foul fish come down at an earlier period than the female?—They do.

Are there any foul fish in your part of the river that have not spawned, or are the foul fish you have been speaking of all fish that have spawned?—In the early part of the season there are a number that have not spawned, but the number I cannot say.

Are they foul fish?—Yes, they are foul before they spawn.

Are they unwholesome?—Yes, they are just at the spawning time; they are very sick and poorly.

Do the men ever kill them?—No, they are very strictly watched; they are very valuable.

Mr. *Henry Goter*, called in; and Examined by Mr. *Bligh*.

Mr. *Henry Goter.*

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ARE you acquainted with the fisheries in the Tay?—I am not.

What are you?—A London salesman.

Do you sell fish for the owners or lessees of the fisheries in the Tay?—I do.

Are you in the habit of receiving fish from that river in the months of January and February?—Yes.

What is the quality of the fish in those months?—Very good.

Is it better in January or in February?—I think it best in February.

Can you state the comparative qualities of the fish in February and March or any succeeding months, are they better or worse?—We find the fish are better to us in the month of February than in March or April.

In what respect are they better?—They are brighter and appear more in season.

How is it in point of comparative weight?—They appear heavier in that month than any other month.

Did you ever ascertain the weight?—No.

Judging by the eye, are they as fine fish in February as in May?—I think the fish are much finer in February than in May.

Cross-examined by Mr. *Rolfe*.

Do they not sell a good deal higher in February?—Yes; the prices are higher in February than in May.

(*Committee.*)—You speak of the high price; did you ever taste any of them?—No, I cannot say I have; but the fish are generally in greater perfection in February than in May.

Have you tasted them?—No; but the eye will tell us.

Have you had any fish sent up to you seized by the authorities in the City?—I think one or two.

What time did it come?—I cannot say whether it was in February, or when it was; but I have had it happen once, and only once.

Mr. *Henry Goter.* 21 May 1827.

Up to what time do you conceive fish in season from that day?—Up to September.

What is the total number in any month in the fishing season you receive, compared with February?—We receive more in March than in February.

What do you receive in April?—Still more.

Until what month does the quantity go on increasing?—June, July and August.

Up to the month of July, the total quantity you receive in season goes on increasing?—Yes.

How are the fish in June and July, with respect to February, are they better?—No, it is impossible they can be better than in February.

Are they better in June, July and August, than in March and April?—No, I do not think that.

Are they better in March and April than in May?—In March and February I think they are better than in later months.

Are they better in March and April than in January?—Yes, I think they are.

Can you state the number of boxes you receive in January?—Very few; the whole trade I should suppose would not receive more than 50 boxes.

In February?—They greatly increase.

Can you give any notion?—No; there are several salesmen besides me.

What do you receive yourself; how many boxes have you received in January in any year?—I cannot say without my books; I may have received 10 or 20, and sometimes more; they greatly increase after February, every month we find an increase.

Can you recollect the greatest number you ever received in July?—No.

You could furnish that information?—Yes.

From what river do you receive salmon in December and January?—Only from the Tay.

I thought you only received it in February from the Tay?—No; I may have received a salmon or two at the latter end of December, and that from the Tay.

Have you none from the north of Scotland?—No, not so early as that; I do business for people there, but none comes to me.

But there are salmon caught in December and January?—A very few.

Do you get any from the south of Ireland in those months?—Yes, there is some; but I do not get any.

Did you ever hear of any fish caught in January in the river Thursoe?—They are not sent to our market.

Have you any means of distinguishing the salmon that come from fresh water and that that comes from salt water?—It is impossible for me to tell.

Do you deal with more fishery companies than one upon the Tay?—No, only that one below Perth.

What should you consider a fair price of salmon in February?—It depends upon the supply; it may be 3*s*. 6*d*. or 4*s*. a lb.

You would consider that not an unfair price?—No, it is the price generally looked for.

In the month of July what is the price?—From ten pence to eleven pence.

And occasionally as low as sixpence?—It is often the case.

What do you consider a fair price in January?—From three shillings to four shillings a pound.

The same as in February?—Yes.

Though the supply is much less?—Yes.

What does that arise from?—I cannot tell.

Do you receive any fish from the southern coast of England?—No, I do not.

You know nothing about it?—No.

Do you receive any from Christchurch, in Hampshire, in the early months?—There is only one, Mr. Saunders, that receives it; there is a gentleman in the room that receives salmon from Berwick and other places.

Do you deal exclusively with the Tay?—No, I have some from Montrose and Dundee.

None so early as the Tay?—No.

Do you know the quality of the salmon from the south of Ireland?—Some of it is very good.

In the month of December?—Yes, sometimes I have seen very good in December, and some very indifferent; they are not so particular in sending it as from the north.

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Is it from its being out of season, or the insufficient mode of carriage?—It has not been so fully in season.

Am I to understand you that there is more foul fish sold in the market from Ireland than Scotland?—Yes, I should suppose so, because they begin earlier, and I apprehend they are not so careful.

Do you receive any fish from the Severn?—Very few now, there used to be a great many; we have not one now of a morning, where we used to have a hundred.

You consider the fish in the English rivers to be very much diminished?—Yes.

Can you account for it?—No, I cannot.

Is there a decrease since you have been acquainted with the fisheries in Scotland?—Yes, there has been a decline; in the year 1816, there was an immense quantity, it was very productive.

Has there been a progressive decrease?—No, because another year it may decrease and the next year it may increase.

Is the supply as great from the Tay as it used to be?—Not so great this season as it was for the last few years past.

Does the supply from Ireland increase or decrease?—It has increased.

Do you know from what part of Ireland?—No, I do not.

You have not dealt in fish from Ireland?—No, but no fish can come to our market without my being aware of it.

Mr. *Talfourd* was heard on behalf of the Irish Salmon Fishery Society.

Mr. *George Sheppard*, called in; and Examined by Mr. *Talfourd*.

Mr. *George Sheppard.*

SINCE you were examined before the Select Committee, two years ago, have you taken much pains to ascertain the state of the fisheries in Ireland?—A great deal.

Are you acquainted with them?—Very generally; I have taken a great deal of pains.

Are the seasons, with respect to the rivers in Ireland when the fish go into those rivers from the sea, the same, or do they vary in different parts?—There is a difference of six months between which fish are found to ascend various rivers.

Will you have the goodness to specify in detail the various times applicable to particular rivers?—They are the westerly rivers of Ireland, and particularly the Carragh, producing their new fish in the months of November, December, January and February, and a great part of March. The river Lee, which runs through the city of Cork, produces its new salmon in the month of December; in that river, also, they continue to run till the first of April; the fish then decline. The river Bush, in the county of Antrim, is also a very early river; the river of Newport commences at the same time; the river Bundrouse, in the county of Donegal, commences at the same time; the river Rathmelton is also an early river, and produces its new fish in December; and there are a few others, whose names I do not immediately recollect, in various parts of Ireland. In those rivers the fishing season is over about the first of April, and there are rivers in Ireland that do not produce their new fish till the first of May, particularly the river Erne, and the Great Ballyshannon river.

Do you know any thing of the manner in which the existing laws of Ireland are executed, as to the preservation of fish?—I have made myself pretty well acquainted with the Irish laws; I have got the Irish code here, and, from my knowledge of the fishing, I conceive there is not a device or method that could be used for the injury of salmon, either preparatory to spawning, or after having spawned, or any injury that could be sustained by the fry, but what is amply provided for by the existing laws in Ireland; if any honourable Member of the Committee pleases to name any possible offence that could be committed against, or injury sustained by the fisheries in Ireland, I am ready to direct his attention to an Act to remedy it.

(*Committee.*)—You say there are rivers that do not produce fish till the month of May; do you mean to say, that the close time is extended till May in those rivers?—They have not the new fish to take before that time.

They have other fish to take?—They do not fish before that time; they are prevented by an Act of Parliament.

(Mr. *Talfourd.*)—Are you acquainted with the fishery of the river Lee?—Perfectly.

What is the yearly value of the fishery?—About £. 1,000.

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At what time is it that the new salmon are found to ascend the river first?—In the month of December, and a few in November.

How long do they continue to ascend?—Until the end of the month of March, or the beginning of April.

Are there any rivers in Ireland that produce their new salmon so early as that?—I have enumerated a number of them.

And many that produce them much later?—Yes.

Does the proprietor of the Lee enjoy any particular advantage, from being able to produce fish so early?—Very considerable.

What is the nature of the advantage?—Since the establishment of steam packets between Cork and Bristol, and Cork and Liverpool, he is able to supply those markets with fish at those very early periods, and obtain very great prices.

Can you tell what would be the loss in money to the proprietor of that fishery, if the fence months were extended?—The average loss for the last seven years would be over £. 600.; £. 601. and some trifle, if the proposed fence months were extended to that river.

Has there been any decrease in the river Lee in the salmon, of late?—Yes, in the last ten years.

To what do you attribute the decrease?—First, to the destruction of the spawning or parent fish on its bed, preparatory to spawning by lights at night and spears; and next, to the destruction of the fry on its retreat to the sea, in mill-dams, and water courses, particularly at a large government establishment on the river, the powder works.

Are there not laws for the punishment and prevention of the offences you have mentioned?—There are ample laws.

How is it they have not been prevented?—Owing to the ignorance of their existence, or the apathy of those who are or ought to be interested.

Is it not the interest of every proprietor of a fishery, to let the fish pass up for the purpose of spawning?—Yes.

Would not the increase of the salmon in any river be in proportion to the parent fish going up?—By no means, that is quite a mistaken idea.

Will you explain how that is?—Salmon do not spawn in still or dead water; they alone spawn in running water saturated with air; they therefore deposit their spawn at the heads of streams in a clear gravel bottom; and if there be a greater number of spawning fish ascend the river than there are situations such as I describe to deposit their spawn in, they destroy each others beds, or destroy the whole.

How long have you been acquainted with the fishery of the river Lee?—Since I have been a child.

Have you any interest in it?—None whatever.

Or in any other fishery?—None whatever.

Do you think it is possible to apply any one particular regulation to all the fisheries in the rivers of Ireland, to produce a beneficial effect as to the close time?—It is morally impossible, without the destruction of the greater part of the fisheries, for the close time comprehends the entire fishing season in many rivers.

The time between December and March would comprehend the whole fishing season in many rivers?—Yes, particularly in those rivers I have enumerated.

Cross-examined by Mr. *Alderson.*

I take it you mean by new salmon, new run fish from the sea?—New salmon or old salmon may be fresh from the sea.

You speak of new salmon coming into the river at a particular period?—Yes.

What do you mean by that phrase?—Though the phraseology of the Bill may be Scotch, I will give it you in Irish; it means the spring fish.

Are they fish just coming from the sea?—Yes, just entering the river.

Have you ever taken any account of the proportionate number of new fish, to those in a state preparatory to spawning in the rivers you have mentioned, at any particular periods?—I have particular accounts of them.

Can you tell me at what period it is in the river Lee the fish come up the river for spawning?—They commence to come up in September; I must beg leave to suggest that it is exclusively a winter fishery, as many other rivers in Ireland are.

I wish to know at what period the fish begin to come up the river Lee to spawn?—In the month of September.

How long does it continue?—So long as the freshes continue, and that is till the months of October and November.

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Do none come up after that?—There may be very few in the month of December; not worth naming; very few.

Are you the gentleman examined before, Mr. George Sheppard, who resides in the city of Cork?—Yes.

Were not you asked on a former occasion as to the number of new run fish in December, whether they outstripped or did not outstrip those of the spawning fish?—Yes, I was.

And you answered that they were more numerous?—Yes, I have answered the same question now.

I wish to know whether or not the fish do not spawn within the river, and the spawn remain in the river till a much later period of the year than that?—It does.

To how late a period is it the fish continue to spawn?—They may be spawning in January; in one year I have known it to be the case; it is an extraordinary thing to be so late.

What is the mode of fishing adopted to catch the new run fish?—In weirs and by nets.

What species of nets and weirs are fixed?—They are draught nets.

Are they drawn over beds?—There are no beds where they are drawn; I never knew a bed of spawn where they drew the nets.

Do they spawn at the higher part of the river?—A great deal higher by thirty miles, or from twenty to thirty.

There is no fishery carried on in the part of the Lee where the spawning takes place?—There is not; there is but one chartered fishery on the river Lee; there is none above it.

Is it defined by specific limits?—Yes.

Is there any thing in the laws in Ireland to prevent persons fishing above those limits?—Yes, there is.

What is that law that prevents them fishing above the chartered company?—The 3d of George the Third, cap. 35.

Will you be so kind as to state the enactment?—It is section 1. "Whereas by an Act of Parliament," &c.—(*Reading the whole of the preamble, and the first part of the enactment.*)—Is it necessary I should go further.

I should imagine so, because I should think that leads to exactly the contrary conclusion that you have mentioned?—

(*Committee.*)—Finish what you were about reading?—"For remedy whereof," &c.—(*Reading the first clause.*)

(Mr. *Alderson.*)—Including the river Lee?—No; the Act goes no further as to the Lee.

You said there was a chartered company that extended up to a certain point upon the Lee?—The fishery is enjoyed under a charter from Charles the Second, by an individual.

I asked you whether that charter defines certain limits in the river, beyond which the fishery was not to go?—A copy of the charter is here.

You have just now told us, that it was within certain limits, and that it did not come within thirty miles where the spawn was; I ask you whether the fishery which you are speaking of is defined by any certain local limits?—Indeed, I am not prepared to say where it extends; but they never fish further up the river than the weir.

Is there anything to prevent them fishing above, in point of law?—There may be laws, for what I know, to prevent them; but there is but one chartered fishery on the river, and the proprietor of that never fishes above the weir; the space he fishes on is not longer than this Committee room.

To whom does the fishery above the weir belong?—There is no fishery above the weir.

Are there fish?—The spawning fish are there.

Is there anything to prevent the new run fish going there?—Yes.

What?—The chartered fishery.

The fish would not take much notice of them?—No; but the chartered fishery might take notice of the fish; it does not let them pass.

Is there any obstacle to prevent the new run fish going where the spawning fish should go?—Yes; the nets are all in their way.

Why do they not catch the spawning fish; are they so constructed as to let them through?—At the season the spawning fish are running, there is a sea of water flowing over it; no net or weir can obstruct them.

Is there anything in the law of Ireland, or any other cause, that is to prevent

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people catching spawning fish when they are above this weir, or disturbing the beds where the fish had laid their spawn above the place to which you refer?—Yes, there is.

What is it?—Plenty of laws to prevent them taking them.

You have hit upon one which does not, in my judgment, prove that; have you any other?—The 26th of George the Third is against angling at that time.

The question was, as to the drawing the nets, which nets, when drawn over the spawn beds, will disturb them; what provision is there to prevent that?—The 8th of George the First.

Does that prevent the drawing of nets in the river Lee?—In any river.

What does it prohibit?—It prohibits the taking of spawning fish with nets, or any other instruments.

The question had reference to the drawing the nets over the spawning beds?—What nets.

Is there anything to prevent the drawing of nets, which nets, being drawn, will go over the spawning place where the eggs are deposited?—Yes; there are various laws.

Give me one of them?—The Acts I have referred you to; the 3d of George the Third prevents any body but the proprietor of a Salmon Fishery doing it.

Therefore I asked you whether the Salmon Fishery on the river Lee had any limits?—I am not prepared to state that; I am not aware of them; there are limits, but I do not know what they are.

Out of the limits, is there anything to prevent it?—The limits may be the whole river; there is no fishery above, nor any net used.

Is there any provision that prohibits people doing it?—Yes, the 26th of George the Third; in my little book it is page 86, that is against angling; the 17th and 18th of George the Third prevents——

What does it prevent?—It forbids instruments, nets or any thing else being used in close time.

During the months that are not the close time, is there any thing to prevent them doing it?—We allow in the Lee such fish as are necessary to stock the river to go up.

Is there any close time in the river Lee by law?—The Act I have alluded to prescribes the close time, that no man shall fish during that time in the river Lee.

What is there to prevent a proprietor fishing during any time he pleases?—His interest, which I think the most powerful.

Is it not his interest to let them up, if not too many?—Yes, abundance of them.

And rather his interest to let too many go up?—No, because if he lets too many go up he destroys the whole.

Which is the best too many or too few?—Too few; because if he lets up too many he destroys the whole, if he lets up too few, he preserves the whole; if he lets up too many, the fish, not having sufficient spawning places, will rip up each others beds.

How is that ascertained?—By ocular demonstration.

Have you seen it?—Yes.

How often?—I cannot tell.

Where?—In the river Lee, at various times and occasions.

What is the mode in which the fish deposit their spawn originally; how do they make their beds?—With their noses.

Will you be so good as to describe it; in what way do they form their beds?—They raise a ridge of gravel, the hen fish then deposits her pea, and the male fish deposits its milter or roe over it, then they mutually act in covering up the bed to protect it from the attacks of eels, trout, and other fish.

What part of the river do they select?—They select but one position, and that must be water saturated or impregnated with air, for which purpose they select strong running currents, with a clear gravelly bottom.

The shallowest parts of the river?—That may be, or may be not.

Is it not usually the shallowest parts of the river?—I have seen salmon select so shallow a part, that when the water was got very low in consequence of a hard frost, you will see the back fin bare exposed above the water; and I have known salmon to spawn in from fourteen to eighteen or twenty inches water, and from that to two feet.

Are those usually the shallowest parts they can find in the river?—No doubt of it.

You say that the spawning fish begin to come up in September, and principally in October?—Yes, October is the heaviest month.

How

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How long are they in the river before they deposit their spawn?—That depends upon the season; a frosty season facilitates the spawning.

Usually in what month do the fish that come up in October spawn?—It may be a day afterwards, or three weeks.

Usually what is the period?—I could not name any given period.

In that river?—The fry come down in April, and I have seen fry early in December.

Do the majority of the fry come down in April?—That depends upon whether there are freshes in the river; if there are strong freshes it facilitates the progress of the fry.

A fish running up to spawn in October, when does it, generally speaking, deposit its spawn?—In November and December.

If there were 100 fish went up in October, would 99 out of 100 deposit their spawn in November?—I cannot say that.

What is the usual period in which a fish comes up the river, previously to depositing its spawn?—I have seen fish ascend the river, whose spawn was not granulated, it was enveloped in a case, which shews the fish was not disposed to spawn.

Was that an excepted case?—A fish may spawn a day or two afterwards, or a week or two afterwards.

Do they usually do so?—I have said, it depends upon the state in which the pea may be.

Is it usual for the fish to come up the river in a state to deposit her spawn, in a day or two, or one week or five?—I have seen some fish come up, ready to deposit it immediately.

Is that the usual custom?—I have seen some not ready to deposit it in a month.

Which of the two is the most usual?—That is a subject I have not directed my attention to.

You do not think it material to inform the Committee, whether it be usual for the fish to deposit their spawn before December or after December, or before November or after November?—Yes, I do; and it is my wish to give the Committee every information I can.

Which is the most usual time?—They generally deposit their spawn after September.

At what period of time is it that the fishery is open to persons; when do they begin to fish?—They get them first early in December.

What is there to prevent them catching the fish coming up to spawn?—Their interest.

If you put a net into the river, what is there to prevent the net intercepting fish of that description?—Persons only put nets in to catch the fish.

What is there to prevent a net catching fish in an improper state?—The interest of the proprietor.

You say, the fish come up in October, and deposit their spawn in November, and a few new fish come down in December, would not the net prevent the fish coming up to spawn?—No.

Why not?—Because the taking a few fish, would not compensate for the detriment that would arise.

You say they try for the new fish in December?—Yes.

And the fish are then coming up the river for spawning?—They are up the river a long way then.

Are not some coming up to spawn at the time they catch the others?—Very few, they catch some.

Do you mean to say, they catch salmon and heave them out of the water, and then put them back, without the fish being any thing the worse for it?—Yes, you may take a few scales off, but not to injure them.

But do you mean to say that that is the practice?—I do not say it is the practice generally.

In general do they keep them?—I do not speak of all our rivers.

In speaking of the river Lee, when speaking of the spawning fish, do they let them go again when they catch them?—Not always.

Do they ever?—Sometimes.

How often have you seen them let them go?—I cannot say the number; the number of old fish running in December is so trifling, it is only a drop in the sea.

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Examined by the *Committee.*

You say you have no interest in the fishery, was this information obtained entirely for your amusement?—I have always turned my thoughts to the fisheries of Ireland, I am conversant with the sea fishing as well as the river fishing, and I have attended to the concerns of a large fishery for a friend for the last eight years while he was under difficulties.

As an agent?—No, not as an agent; I have received no compensation, I have done it gratuitously, without fee or reward.

You have an interest in the Lee fishery?—I have not.

Your friend has?—Yes, my friend has.

When you were examined before, your evidence was confined to the river Lee principally?—I was examined, I beg to say with great respect to the Committee, only on one side of the question.

On which side of the question?—I trust I am not indecorous in saying, that there were no questions asked me that bore on the interest of the proprietors.

You consider you were examined against the Irish proprietors?—I was asked such questions as bore against them.

Your acquaintance with other rivers has only commenced since you were examined before?—I was acquainted with them before; but I have made myself particularly acquainted with them since May 1825.

Are there Acts of Parliament fixing close time to all the rivers you have mentioned?—Yes, there are; I consider that there are Acts defining the periods at which all the rivers of Ireland should commence.

When you spoke of the time they produced new fish, did you speak in reference to your own opinion and knowledge, or the close time in those Acts?—I speak of the periods from which I know they take their new fish.

You have seen it in all the rivers you have mentioned?—I have seen the fish brought to different markets from them.

Do the enactments in the several Acts applying to those rivers exactly accord with those times when you say the rivers produce new fish?—The Acts permit them to take them at that season.

Do they prevent them taking them at any other time?—I cannot tell the time.

You are of opinion the enactments of the legislature afford all necessary protection?—The sense of all the proprietors of the Irish fisheries has been taken within the last month, and the whole of them concur in stating that the present law is ample for the protection and maintenance of their property; the fishery interest is in such a state that the contemplated law is conceived to be uncalled for.

And that the close time is suited to all the rivers?—That the law is adapted to it.

They authorized you to come and say that?—I attended their meeting and was requested to give my evidence as being a person acquainted with the fishery; but I came over to support the prayer of the petition not yet before the Committee.

You do not come here as an authorized agent?—Yes, I do; to give general evidence.

They authorize you to state they are quite content with the laws as they stand?—Yes.

Do the preambles of the different Acts recite the spawning time as the ground upon which those Acts are framed?—Yes, they do; it will appear that in the year 1774, a Bill was introduced into the Irish House of Commons, having for its object a general fence or close time, and a weekly close time, such as the two clauses now complained of; and the proprietors of the great fisheries in Ireland memorialled His Majesty upon the subject, and he was pleased to refer it to the attorney and solicitor general of that day; who, if I recollect right, were Thurlow and Wedderburne, and after having heard evidence upon those clauses for and against, they expunged them altogether, declaring or reporting that a general fence or close time was inapplicable, as a vast difference existed as to the periods of time at which new fish ascended the various rivers in Ireland; they expunged the clause as to the weekly close time, stating as their reason that fish did not spawn in Ireland in the rivers for which this weekly close time was proposed, and allowing fish to go up at that period would be destructive of private property and do no public good, as they did not increase their species; that was the report made in 1774.

Do you mean to say, having made yourself master so much as you have of the Salmon Fisheries, that there can be no possible improvement in the time of the close months in the Irish fisheries?—I take upon me to say, that that is the opinion of all the proprietors and occupiers of the fisheries in Ireland.

That

Mr. *George Sheppard.*

21 May 1827.

That the present state of the law is perfect?—They are perfectly satisfied; they all petitioned; they have met and petitioned against this Bill, and to my knowledge there has not been a single petition from Ireland in favour of it.

By the weekly close time you mean a certain number of hours?—It is from Saturday evening at eight o'clock to Monday morning at four o'clock.

If that was to become the law, would not fresh fish ascend the rivers during that time if there was water enough?—Yes, but it would be a mere transfer of the vested rights of individuals into the hands of poachers up the river.

It would permit the fish to ascend to the upper part of the stream, when there was water to carry them up?—Yes, and transfer the property of individuals into the hands of poachers.

Might not that induce persons in the upper part of the river not to interfere with the spawning beds, if they had a prospect of getting some fish, when the fish were in season?—Yes, it would, upon the same principle, that if the honourable Member had a number of deer in his park, and he gave me three-fourteenths of his deer, I would not break down his hedge.

You say the fish in the Lee have decreased?—In the last ten years there was a decrease; they are now increasing again, and I attribute that to the exertions made on the river: I never heard that there was a conviction on the river for transgressions against the Fishing Laws till the last few years; in one year I convicted several gentlemen in taking fry in their nets.

Can you state in what proportion they have increased?—I cannot state that.

You have given us in the words of the Irish statute, the close time in Ireland commencing the 12th of August and ending the 1st of February, that is the close time generally?—There are various close times.

With reference to the Lee, you have read a statute fixing that as the close time?—It is for several rivers.

You have informed the Committee also, that the practice was to fish for new fish in December?—That close time is only applicable to persons not proprietors of the fisheries; the proprietors of fisheries by the present Act are allowed the power of protecting their spawning Salmon, and taking new fish when they offer.

The law is to fix the close time for persons not proprietors of fish?—In some rivers, it only alludes to a few.

Do you mean to say that persons not proprietors may catch fish at every other period?—They are debarred by the Act from doing it; any man that is not a proprietor may fish out of the close time by the permission of the proprietor or on his own lands.

You have stated that the fishery is over in the Lee and other rivers in the month of April?—Yes, in the early part of April.

In the month of May, if there are freshes, will not there be found a large quantity of fish in the water?—In May, June or July, if there are freshes, the Salmon Fishery is succeeded by the run of a few peel.

Do you mean to say, there will not be plenty of peel if there are freshes in May, June and July?—Not many; the chief of the fishing is in winter.

Do you extend this to the rivers Bush and Bann?—I apply it to the river Lee.

Do you extend this observation, that the fishery is over in April to the rivers Bann and Bush?—No; they get it later.

Do you mean to say, that as late as July in the Bush, they do not get a quantity of fish?—I am aware they take fish in July in that river, but very few; it is a very early fishery.

Did you ever see the shallows in the river, from letting a large number come up so excessively, filled with spawners, there was not room for them to deposit their spawn?—I have seen from the number of fish got up, and the places they select not being sufficiently numerous, a great quantity of spawn destroyed.

How do you account for rivers in a state of nature containing any quantity of fish when none are impeded running up?—There may be many reasons for it; if there were many porpoises in the river, they would soon supply the difficulty; if they were in the mouths of any river, they would thin them fast enough.

You have stated one cause which led to the diminution of the quantity of fish, was, that too many spawned fish were allowed to go up; how do you account for rivers in a state of nature containing a quantity of salmon when the quantity of spawners is unlimited?—I am not saying what the quantity of fish is in a river in a state of nature, they may have little or much; I am not able to answer that question.

Do you apprehend that the river Lee, and other rivers mentioned, contain more fish under the present system of regulations than they would in a state of nature?—

Mr. George Sheppard.

21 May 1827.

By no means; if all the properties in the fisheries were naturalized, they would be a great deal more abundant than they are.

Are there any weirs in the river Lee?—Only one chartered weir; there is another little thing not worth naming, which lets for 30 *l.* a year.

Are the fish able to get up those weirs?—The tide flows over them, and the fish pass over with the tide.

You say that a weekly close time would give the fish up to the poachers; why are there more poachers in the upper part of the river than the lower?—The lower part is under the eye of the proprietors, and the poachers would not come there.

You are talking of the river Lee?—Yes.

You confine it to that river only?—I confine it to every river in the country, or rather I extend it to all rivers.

Are there not rivers where they are protected all the way up?—Yes.

The fish that go up will not be more liable to be caught by the poachers than below?—Above, the fish are in sight; below, they are in deep water; they are not exposed to view; whereas higher up every man may see them; and if they never saw them they know where to find them; they show a light, and the fish come to the surface.

That they could do in deep water?—How could they do it where there is a deep estuary.

That you apply to the river Lee?—Any river where there is deep water; another observation I beg to add, as to the weekly close time, and that is, that if that close time was extended to many rivers in Ireland, the majority of them, four-fifths, where there are weirs, it may take the man or proprietor one or two hours to remove those cruives or gratings, as they may be called, as the clause says, that all obstructions to the free passage of the fish up the river must be removed during this weekly close time, though a man may remove those obstructions in one hour; in nine cases out of ten he could not put them down in the remaining part of the week.

Are you not aware that the removal of one single grating in the upper series of gratings in the cruives would be sufficient to let all the fish in the cruives out?—Yes, when they get into the cruives.

And therefore, in order to let the fish through, it would not be necessary to remove the whole series of gratings, but any one bar would be sufficient to let the fish pass?—It would, on the same principle that the removing of one bar in a rat trap would let the rat out.

Does not the law in Ireland require what is called the King's Gap to be opened in every weir?—It does not, except where there is one weir above another.

Does not it in most rivers require it?—In every river where there is a fishery above another, or where the fisheries are not the property of one individual.

Does not it require it in every river where the decided property in the river is not exclusively in one person?—I cannot say that.

Where the right of fishery is not exclusively granted, does not the right of fishery attach to the soil?—Not in all cases; any man may fish where there is not a right of property.

And it would attach to the soil?—No, a tenant may fish on his own ground.

Where there is a right of fishery above a weir, is not the proprietor of that weir bound to leave the King's gap open?—I cannot say whether there is or not, but there are various rivers that must have the King's gap in them.

Is not that law frequently violated in Ireland?—I am aware it has been rendered nugatory, for in those gaps they place various devices to deter the fish from going up.

Do you know, of your own knowledge, that in any river besides the Lee, the fishing is over in the month of April?—In those early rivers I enumerated, the bulk of the fishing is over in April; they get grilse afterwards, but they are of no magnitude.

You apply this as well to the Bann and the Bush?—The Bush is two months earlier than the Bann, although they are within six miles of each other.

You apply this remark, that the fishing is over in the month of April, to the Bann and the Bush?—Not to the Bann; the Bush is two months earlier than the other; the fishing is over two months in the Bush before it is in the Bann.

When is the fishing over in the Bann?—After April they get a large quantity.

When is the fishing over in the Bush?—Two months earlier.

In what month?—The Salmon Fishery declines in March. I have heard the fish fall off in that period.

That is only one month earlier?—They take their new fish two months earlier in the Bush than the Bann.

The question is, when is the bulk of the fishing over in the Bann?—I cannot say whether it is in April or not. Mr. *George Sheppard.* 21 May 1827.

Is it over in July?—They get grilse in July.

Do you know the river Carran?—Yes; they get large quantities of fish from that.

Do you know in what month they begin to fish there?—I have seen large quantities of fine salmon arrive from Carran at Cork, in the month of December; they are then shipped for England by the steam packets.

Do you conceive that the fenced period chosen by this Act would be very injurious to the proprietors of that fishery?—It will be totally destructive of that fishery.

Do you know the prices at which they dispose of their fish, previous to March?—I know fish taken in December will fetch from three shillings to four shillings a pound, while the fish taken in March will not bring more than one shilling a pound.

Martis, 22° die Maij, 1827.

Mr. *George Sheppard*, again called in; and Examined by the Committee.

YOU seem to know a great deal about the history of salmon, do you know whether there is a great deal of spawn destroyed after it is deposited in the upper parts of the river, by the peasantry?—I never heard of such a transaction occurring on the river Lee, by spawn, I mean the pea; I never heard of an instance of it. Mr. *George Sheppard.* 22 May 1827.

You do not know whether any great destruction does take place of the pea, in any rivers in Ireland?—I never heard of it; the fry have been destroyed in great numbers, when they get animated, about the end of May, numbers of them.

Before they swim?—No, after.

When they come down to the mill-dams?—Yes, I am sure the spawn is not destroyed in the way mentioned, or I should have heard of it.

Is the salmon spawn ever used for bait in Ireland?—I have seen it used.

Where is it got?—I have never heard of it being got, but out of the fish, not out of the spawning fish.

Mr. *Rolfe* was heard in support of the clause regulating the close time.

A letter from Walter Jamieson, dated Kelso, 16th of March 1825, appearing upon the Report of the Committee of 1825, on the Salmon Fisheries of the United Kingdom, was read.

The Right Honourable Sir John Sinclair attended, and delivered in a statement, which was read.

Mr. *Campbell* was heard on behalf of the proprietors of Fisheries in the rivers Dee and Don.

Mr. *Bligh* was heard on the part of the owners of Fisheries in the river Tay.

The committee-room was cleared.

After some time, the counsel and parties were again called in, and informed that the Committee had come to a resolution, That the clause relating to the close time should stand part of the Bill, but that the clause was amended, by inserting the 15th of February, instead of the 1st of March.

Mercurij, 23° die Maij, 1827.

ON the Clause as to the Weekly Close Time.

Mr. *Campbell* was heard to propose an amendment in the Clause.

Mr. *Bligh* was heard in objection to the Clause.

Mr. *Robert Buist*, again called in; and Examined by Mr. *Bligh*.

You are engaged in the fisheries of the Tay?—Yes. Mr. *Robert Buist.* 23 May 1827.

And well acquainted with the fishing grounds on that river?—Yes.

 What

Mr. *Robert Buist.*

23 May 1827.

What is the weekly close time, according to the law, as it stands at present?—The weekly close time is from twelve o'clock on Saturday night till twelve o'clock on Sunday night; but we never fish on Saturday past ten o'clock.

Now if the time was altered, by closing the fisheries at eight o'clock on Saturday, do you conceive it would be attended with any loss to the proprietors of the fisheries immediately above the frith, and below the upper fisheries?—It would be attended with considerable loss to that part of the river you have described. When the tide happens at four or six o'clock, the greater part of those fishings could not get to work between that hour and eight o'clock on Saturday night; and also on Monday morning they would lose a whole tide, from twelve till about nine; they could not get to work till nine o'clock in the morning.

Does it happen, that when the tide is between from four to six o'clock, the tides are at the high?—Yes.

Is that the reason why you are unable to commence your fishing for some hours?—The greater part of those fishings I allude to in the tideway of the river, for three hours before and three hours after, you can get no work, in consequence of the state of the water.

At the period of high tides, the waters are higher at the flood, and lower at the ebb; consequently you cannot commence your fishing till some time after the tide begins to flow?—Yes, and after a certain time.

Do you conceive, that in this period, when you are unable to fish, a great many shoals of salmon, that happened to come in at that time, may pass to the upper fisheries, and be lost to the fisheries between the frith and the upper ground?—From any observations I have made as to the progress of salmon upwards, those passing on Saturday night may be taken on Monday morning, about twelve miles above; and those passing on Monday morning between twelve and four, would be taken at the fishing immediately above the tideway.

Would the consequence of that be a loss to the proprietors of the fisheries between the frith und the upper fisheries?—It would be a very considerable loss to those in the tideway, as it would cause a good deal of loss, of two tides fishing in a fortnight.

Are there in the tideway any valuable fisheries?—The most valuable fishings are in the tide way.

You mean in the Tay?—Yes.

Can you form any estimate or calculation of the loss that would be suffered by that weekly opening?—That is impossible to say, because it is just as two tides are to all the other tides in a fortnight.

Would it depend very much upon whether it happened to be a run of fish, or high or mean tides?—Yes, it would; it would depend upon whether a shoal of fish happened to be coming in, or whether it was high, or mean tides.

In the case of a shoal being coming in at the time of high tides, the close being at eight o'clock, would considerable injury be suffered?—The great probability is, that the greater part of those fish coming in on Saturday night might go forward, and the remainder might fall back with the tide.

Upon the whole would the loss be considerable to the owners of fisheries in the tideway, in the case mentioned?—As it causes a loss of two tides in a fortnight there would be a proportional loss of fish.

Cross-examined by Mr. *Alderson.*

Are there any fisheries below you that have cruives?—None.

Yours is the first fishery that has cruives?—We have no cruives upon the Tay.

What is it you wish to avoid on the Saturday?—Our practice is to enable the men to fish in the usual way by net and cobles during the usual hours.

You are speaking of what the practice is?—Yes.

If the law should happen to be that you are only to fish from sun-set to sun-rise, would you consider the provision now introduced an advantage to you; would it be better than the present law?—Yes, it might be better, because it would be without confusion.

Supposing it was a perfectly clear case, that by the law as it at present stands, you had no right to fish from sun set on Saturday till sun rise on Monday, would you not consider from eight o'clock to four o'clock a better thing?—It would be more advantageous.

You would have more hours?—Yes.

If the law should be so this is an advantage to you?—Yes.

Re-examined

Re-examined by Mr. *Bligh*.

Is not the principal fishing season from May to August?—Yes.

Does the sun go down at eight o'clock from May to August?—From half past seven to nine.

Mr. *Robert Buist*. 23 May 1827.

Mr. *Alderson* was heard in support of the Clause.

Jovis, 24° die Maij, 1827.

ON the Clauses relating to Stake Nets.

Mr. *Keay* was heard on behalf of the proprietors and tacksmen of fisheries in the river Tay against the Clauses.

Mr. *Campbell* was heard on behalf of the proprietors of the fisheries in the rivers Dee and Don against the Clauses.

The appeal case in the cause of the Earl of Kintore and others, appellants, and James Forbes, respondent, was delivered in by Mr. *Campbell*.

The appeal case in the cause of the Duke of Athol, appellant, and William Maule, respondent, was delivered in by Mr. *Keay*.

Mr. *Robert Buist*, was again called in; and further Examined by Mr. *Bligh*.

Are you agent and manager for the upper heritors of the fisheries of the Tay?—I am the principal manager of the fishing company in the Tay, not the upper heritors; in order to understand me, may I beg to lay this plan before the Committee, in order to show what I mean by the river and the estuary.

Mr. *Robert Buist*. 24 May 1827.

[*The Witness delivered in a Plan and explained it to the Committee.*]

Do you remember the period when stake nets were first introduced into the Tay?—At that time we were not in business; the first period I was connected with the fishery was four years before the removal.

Were you in business when a general action of declaration was raised with respect to the stake nets fixed by the sea side?—No.

Do you remember the fixing of the stake nets lower down the river?—I remember when we were in business first, that those nets were fishing in the estuary, they were not fixed at that time.

Do the salmon come singly or continually, or in shoals, at different periods?—In the early part of the season they seem to come on gradually; but in the principal part of the season, about the months of June, July and August, they come on the coast in large shoals, apparently, at least, from my own observation.

Are those which come in April and May comparatively few with respect to the shoals that come afterwards?—They are fewer now; about that time we had the principal fishery in April and May, as the stake nets then did not fish so well.

Which do you consider the great fishing months?—At present June, July and August.

During those months of June, July and August, do the salmon come periodically in great shoals?—They generally do come in great shoals.

Is it your opinion that great part of those shoals are intercepted by the stake nets?—My opinion certainly is, that they were intercepted by the stake nets.

While they existed?—Yes, while they existed.

Have you examined and compared salmon taken up the river at your fisheries with salmon taken in the stake nets?—No, I never did.

Did you ever examine any of the salmon taken in the stake nets at the mouth of the river?—No.

Have you seen any taken on the banks of the estuary?—Very often.

Have you seen them opened in breeding seasons?—No; I beg to explain; we have fishings in the river and fishings in the estuary, and those are sent up to London in the same vessels.

In the breeding season have you had an opportunity of seeing the state of salmon taken in the estuary?—No, not in the breeding season, for they do not take them.

I mean in the season when they are beginning to breed?—I have seen the salmon in June, July and August; about that time the roe and melt is very small.

Mr. *Robert Buist.*

24 May 1827.

Have you seen them taken in the estuary when the roe and melt is increasing?—No.

Do they, at the proper season, come up with the melt and roe up the river, as well as in the estuary?—The salmon taken up the river and in the estuary, I think, are the very same in condition and quality in every respect.

For the five years preceding the time when the stake nets were abolished by the decision in the House of Lords, can you state while the stake nets were existing, the number taken up the river?—I can do so, of particular fishings.

Specify what they are?—The average of the city of Perth's fishing for four years, 1809, 1810, 1811, 1812, when the stake nets were in the estuary, was 1,543 salmon and 824 grilses.

(Mr. *Alderson.*)—Will you give us what were caught in each year?—I could give it from my book.

Do so, it would be more satisfactory?—I find I have left the book for 1809 at home; I have the other years; the spring fishing for 1810, in the Perth fishings, up to the 1st of May, was 316 salmon; the summer fishing 1,859 and 762 grilses; in 1811 the spring fishing was 278, and the summer 1,285 salmon and 364 grilses; in 1812 the spring fishing was 190 and the summer 412, and 1,367 grilses.

Were the stake nets removed partly in the year 1812, and removed lower down?—In the month of December 1812 the Court of Session granted an interdict against the nets down to Broughty Castle.

State the average of the four years after the removal under the first judgment of the Court of Session?—The average of the next four years after the removal of the nets, was 3,673 salmon and 3,620 grilses.

Now give the actual number in each year?—In 1813 there were 4,475 fish and 2,553 grilses; in the next year 1814, 3,628 salmon, 2,487 grilses; in 1815, 3,124 salmon and 4,647 grilses; in 1816, we had 3,468 salmon and 4,796 grilses.

(*Committee.*)—Have you any average of the next four years?—We had only those fishings for another year after that in 1817, 3,708 salmon, 2,342 grilses.

(Mr. *Alderson.*)—Can you give us 1805, 1806, 1807, 1808?—Not from my own knowledge we had Lord Mansfield's fishing in 1812, and there we had 756 salmon and 450 grilses; in 1813, the first year after the removal of the stake nets, 1,842 salmon and 838 grilses; we had Sir David's Moncrieff's fishings for three years before and three years after the removal of the nets; and the average of the first three years was 974 salmon and 617 grilses; and for the three years after the removal of the stake nets, 2,467 salmon, 1,891 grilses.

Can you state the amount of Lord Gray's fishings?—Not for those years.

For what years can you state them?—I can state Lord Gray's fishings for 1809 and 1810; in 1809 it was 3,393 salmon and 1,072 grilses; in 1810, 3,132 salmon and 947 grilses.

Now the period after the stake nets were removed?—It will take sometime to get that ready; but I will give it in to the Committee to-morrow.

Are you, from your fisheries, in the habit of sending up fish to the London market by the smacks of the Dundee Shipping Company?—Yes; they are all sent by that company.

Will you state, during the four years preceding the removal of the stake nets, how many boxes were exported by the smacks of this shipping company from the river?—I have a certificate here from the managers of the company, shewing the numbers shipped for those years 1810, 1811 and 1812; and from that date up to the present year, from the whole of the river.

State the numbers for the years 1810, 1811 and 1812?—In 1810 there were shipped from the river Tay 1,325 boxes of 100 lbs. weight each of salmon, and 2,002 kits; a box contains about three kits in weight, therefore you will see the comparison by reducing the kits to boxes, that will make 1,992 boxes. In 1811, 1,162 boxes, 2,005 kits, equal to 1,830 boxes. In 1812, 1,045 boxes, 380 kits, making 1,175 boxes. In 1813, the first year after the removal of the stake nets, 2,389 boxes, 3,933 kits, making together 3,700 boxes. In 1814, 3,836 boxes and 3,423 kits, making together 4,977 boxes. In 1815, 3,780 boxes, 3,604 kits, making together 4,981. In 1816, 5,801 boxes and 263 kits, making together 5,888 boxes. In 1817, 5,931 boxes, 276 kits, making 6,023 boxes. In 1818, 4,618 boxes, 37 kits, making together 4,630 boxes. In 1819, 5,690 boxes, 13 kits, making together 5,694 boxes. In 1820, 4,264 boxes, 12 kits, making together 4,267.

Do you occupy any fisheries on the estuary where the stake nets were?—We occupied

occupied fishings in the estuary; for the first seven years after they were totally removed, we had Mr. Maule of Panmure's fishings; and the town of Dundee's fishings for the first two years; and Colonel Fotheringham of Powrie.

Mr. *Robert Bust.*

24 May 1827.

Upon the statement, that during the time when the stake nets were fished, that between twenty-six and thirty thousand, and taking the average at twenty-eight thousand fish were caught, how many boxes would that make according to your estimate?—From the estuary.

Yes?—As near as I can estimate them according to the weight of our salmon, I should say 4,000 boxes from the estuary by the stake nets.

Have you had an opportunity of estimating the quantity since the stake nets have been removed?—I think, that during the seven years I alluded to as having Mr. Maule's fishing we occupied about a third part of the estuary, and our average produce for those three years was 414 boxes, so that, if you multiply that by three, it will give you the probable produce of the estuary.

Can you tell us what the rents have been of the fisheries in that part of the Tay with which you are acquainted for three or four years before the removal of the stake nets, and three or four years afterwards?—Previous to the removal of the stake nets, the rents of the whole river together were £. 5,101; that does not include the estuary. In 1819, two years after the removal of the stake nets, and after the benefit to the river was known, the rental of that part of the Tay was £. 14,592. and in 1827 the rents were reduced in consequence of the falling off in the fisheries, to £. 12,005; that is the present rental.

With respect to the quality of the river salmon, and the salmon caught in the frith, what are the prices you get in the London market of those respectively; you have both sorts?—Yes; I have taken extracts from our sale books during the principal fishing months of June, July and August, for the last six years, which, if the Committee wish, I can read over to them. In 1818, in the middle of June, of the river boxes, the average price was £. 4. 16*s.* in the London market; and the box from the frith, of the same weight, £. 4. 18*s.* 6*d.* In July of the same year, the river boxes, £. 4. 7*s.*; the frith boxes, £. 4. 8*s.* 6*d.* In August of the same year, the river boxes, £. 3. 16*s.* 5*d.* and the frith boxes, £. 4. 0*s.* 3*d.* In 1819, in June, the river boxes, £. 4. 15*s.* and the frith boxes, £. 4. 19*s.* In July, the river boxes, £. 3. 15*s.* and the frith boxes, £. 3. 13*s.* In August, the river boxes, £. 3. 3*s.* 8*d.* and the frith boxes, £. 3. 4*s.* 10*d.*

(*Committee.*)—Can you give, in any one year, the series of prices, commencing with the earliest month the fish was caught, and ending with the end of the fishery?—I have no document here to shew that, but I can mention, that till the month of June, the estuary gives very few fish, and in the river we have them as high as £. 15. the box.

(Mr. *Bligh.*)—Are the prices in the London markets, of both the fishings, the same or nearly the same, at all times?—Yes, there is a mere trifle of a sixpence or a shilling a box, during the whole year.

Are the fish you catch up the river, generally what are called new run fish?—Generally they are; when we have a large catch of fish, they are generally from the sea, in a very short time.

In what time?—I have letters here from our manager, at the mouth of the Tay, stating that the fish had entered, and we have got those fish at Perth the next day, or as soon as the post.

Do you mean, they are placed there to give you notice?—No, they are put there to manage our fishing, and we desired them to give us notice, when they saw any shoal of fish, so that we might be upon the look out.

As you have fisheries on the estuary, as well as higher up the Tay, you can state whether at the time that there is plenty of fish up the river, there is plenty in the estuary, and *vice versâ*, if there is a scarcity up the river, there is a scarcity in the estuary?—I shall read you an instance or two, which I have kept in our books. On Sunday the 6th of May 1821, a shoal appeared on the coast, and passed right through the frith; we had in the river, 34 and a half boxes, and in the estuary only seven. On Monday or Tuesday the 21st or 22d of May 1821, there was a shoal, and of that there were taken 70 boxes on the 23d of May, in the frith.

(*Committee.*)—At that time were stake nets done away with?—Yes, and on the 26th, three days afterwards, there were forty-five taken in the river. I would also state one circumstance, that in 1823, it was a most uncommonly scarce season, and on Sunday, the 6th of July, of that year, a large shoal came upon the coast, and passed so right through the frith, that only two boxes were taken in the frith, when there

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there were seventy-one taken in the river, and in three days of that week we had an eighth part of the whole river fishing.

Do the salmon come in shoals at particular times, and are those shoals within a few hours at the same time, in the mouth of the estuary, and up the river?—That depends very much upon the weather.

(*Committee.*)—Does not it depend upon there being freshes in the river?—Yes; but generally, if we have the wind from north-east or south-east, we can depend upon them in twenty-four hours; in case of any mistake as to the position of our fishings, the Committee will find that they joined the German Ocean.

(Mr. *Bligh.*)—Will you state, whether you know the fact, that during the period when the stake nets existed, and since, the total number caught and shipped have been the same, taking all the fishings, both in the estuary and up the river?—Only from the data I see, by the reports upon the table.

You have stated the quantity of salmon shipped from the Tay since the stake nets were removed, have you any means of stating the quantity taken by the stake nets and others, while you were there?—I have only the knowledge from the statement in the stake net cause.

Do you know what the quantity shipped from the river was, both from the river and the stake nets in the estuary, while the stake nets were in operation?—I cannot tell what was shipped from the stake nets, further than was mentioned there.

(Mr. *Alderson.*)—One company is dissolved, and the other not?—Yes, but from our own books, and the books of Mr. Bell, the other fisher in the Tay, there appears to have been shipped by the other Shipping Company, during those three years, of the stake nets, sixty boxes.

(*Committee.*)—Could you inform the Committee, whether the general quantity of fish exported from Dundee, while the stake nets were in operation, was greater or less than the quantity exported from Dundee after the stake nets were put down?—From what I have observed, I should say, without hesitation, that as many fish have been shipped from Dundee since as before; I have reason to think so.

Do you know it?—The way I know it is, that I do not think they would make the numbers fewer than they are, as they wish to make it important.

Do you know it?—No, I do not.

(Mr. *Alderson.*)—You make the calculation from certain evidence you see before the Committee?—Yes.

(Mr. *Keay.*)—What is the calculation you make?—From the medium of the account given in by the stake net fishers, it appears that 28,000 salmon were taken, which, in the proportion of seven salmon and four grilses to a box, will give 4,000 boxes.

Cross-examined by Mr. *Alderson*,

I wish to know whether there were not, prior to the stake nets being put down, two companies that sent produce from Dundee?—Yes.

Have you not given an account of only one?—If you will look at the evidence you will find I stated 60 boxes were sent from the river by the other company during those three years.

Have you professed to give any account of the quantity sent by the other company, that was dissolved about the period the stake nets were put down?—Yes; I stated 60 boxes; that was all that was shipped.

Is that all you profess to state was shipped by that company?—All I can find in Mr. Bell's book.

Do you mean that that was all that was shipped by that company?—All I know of.

Do you mean to say, as a man of judgment, that you have the slightest doubt that a large quantity was shipped by that company of which you have no account?—There was not; it is impossible.

Have you looked at the books of the company?—I do not care for their books; I have the books of the Shipping Company, that took the fish to London, and I cannot find any more.

Have you got an account of the boxes sent by the stake net fishers by that company's vessels?—No.

Then how do you know the quantity, unless you know what was sent by the stake net

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net fishers?—The quantity sent by the stake net fishers I take from their own mouths.

Have you given to the Committee any account of the quantity sent by the dissolved company by the stake net fishers?—Certainly not.

Then how can you give this Committee any information of the whole quantity sent to London, or elsewhere, from Dundee, during the period the stake net fisheries subsisted, as compared with the quantity shipped from Dundee since?—I must refer to the evidence from which I stated that.

You have given no acconnt of the fish caught in the years 1803, 1804, 1805, 1806, 1807, 1808?—I have not, because I knew nothing about them.

Do you not know that the stake net fishery subsisted during all that period?—I do.

Do you not know that it was put down in one year during that period, in 1805, by order of the Court of Session?—I beg to state, that the only information I have of that is from the evidence in the stake net cause.

When did you begin to be concerned in this fishery?—From 1809.

Is there any body here to give us the prior years?—No, not that I know of.

Do you not know that one of those years in which the stake net fishery was put down, happened to be one of the most unproductive years of the fishery?—I cannot say that of my own knowledge.

In what way do you conduct your fisheries; what mode of fishing do you adopt?—By net and coble.

How many nets and cobles were employed in 1809?—At the town of Perth fishery eleven, and Sir David Moncreiff's six.

That is in 1809?—From 1809 to 1812.

Were the same number employed during each of those years?—So far as I recollect they were.

Have you any knowledge upon the subject?—This plan [*producing one*] was given in evidence before the House of Lords, and it contains the numbers I have mentioned; it is so long ago I cannot recollect.

You are not able to inform the Committee how many cobles were used in the different years of which you have proved the produce?—No, I cannot.

You cannot tell us how many cobles were used before the nets were removed, although you can tell us afterwards?—I can tell only those used at present.

How many?—By this report there are 74 in the upper part of the river, and altogether 110.

According to the statement in the House of Lords, you said there were seventeen?—That was only at two fishings.

How many were there altogether?—Seventy-four.

Do not particular fisheries in the river vary from time to time?—They do.

One fishery in one year is productive, when another is unproductive?—Yes.

Fish keep to one side of the river in one year more than another?—Yes, if it is a wet season at some fisheries they catch more fish, and at others in a dry season.

Though there may be the same number of salmon originally in the river, they go to the wet or dry side according to the season?—They are more easily taken on one side than the other, according to the season.

Then, in order to know whether it is a good or bad fishery, you must have two facts to guide you; both the number of fish in the river, and the nature of the season?—I do not understand you.

If you are speaking of any particular fishery you ought to know the season?—There is Lord Mansfield's fishing, if it is a wet season there is a good fishing there; if it is a dry season, then at Sir David Moncrieff's there is a good fishing.

A salmon fishery varies very much; sometimes to the extent of one-half, and sometimes to the extent of three-fourths?—The best explanation I can give you of that is the list of the boxes you have to-day.

There was great alarm at the time of the stake nets among the fishers above?—Yes.

And the rents were immediately reduced?—Yes.

Before any experiments were made to see if the thing fell off?—Those are the rents I have now read over; for the last four years of the stake nets we lost £. 1,342. 11*s*. 10½*d*. upon those low rents, and we held at that time about two-fifths of the whole rental I have read over.

Is that the average loss?—No; that is upon the whole four years.

And in one year they were reduced from £. 14,502 to £. 12,005?—No, not in one year; that was up to the present time.

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(*Committee.*)—You state, that when they were at the lower rent you were at a considerable loss?—Yes, £. 1,342. 11 *s.* 10 ½ *d.*; that is upon two-fifths of that £. 5,000 rental.

Of course you increase your cobles and nets as you find the fish increase?—Yes.

If the Tay was well protected, as it respects the breeding salmon, are you of opinion the general produce of the Tay might be very greatly increased?—I am very clearly of opinion, that if the Tay was properly protected, the fish would be greatly increased, and parts of the Bill now brought in are very well adapted to that.

Supposing the Bill framed upon your own notion of the protection necessary for the breeding fish in the Tay, should you think the rents of those fishings might be doubled or trebled?—I cannot say doubled or trebled, but in my opinion they would be increased; last year I had the charge of the Tay, and we had eighty or a hundred instances of men killing salmon by lights and nets, and there was no law to punish them.

Lunæ, 28° die Maij, 1827.

Mr. *Robert Buist*, again called in, and Examined by Mr. *Keay*.

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HAVE you had access to know the produce of Lord Gray's fisheries in the Tay in the years 1809 and 1810?—I have.

Have you had access to know what the produce of those fisheries was in the years 1811 and 1812?—No; we had not those fisheries in those years.

Can you state what was the produce in those years with which you are acquainted?—In 1809, the produce was 3,383 salmon, and 1,072 grilses; in 1810, it was 3,132 salmon, and 947 grilses.

You stated, the other day, that the stake nets were removed in 1812?—Yes.

Have you had occasion to know the produce of Lord Gray's fisheries after the stake nets were removed?—I have had in 1815, and downwards.

Have the goodness to state the number in 1815?—In 1815, 8,239 salmon, and 7,674 grilses.

What was it in 1816?—In 1816, 10,811 salmon, and 12,746 grilses.

What was it in 1817?—In 1817, 15,056 salmon, and 7,719 grilses.

(*Committee.*)—Were the same number of nets and cobles employed in those years?—In consequence of the productiveness of the fishery, there were, perhaps, a greater number of cobles; but the principal fisheries were fished with the same number of cobles.

Cross-examined by Mr. *Rolfe*.

You say there were the same number of cobles used in the years 1815, 1816, and 1817, as there had been in 1809 and 1810?—There might be a few more, in consequence of the productiveness of the salmon.

What number were used in 1815, 1816, and 1817, from whatever cause?—I cannot positively recollect.

Do you undertake to say, that there was the same number employed in 1809 and 1810 as in those years, or anything like that number?—There was at the principal fishing stations; but there were a number more fishing stations than there had been before.

Were the fishings immediately below Lord Gray's fished as much in the years 1809 and 1810 as they were in the subsequent years?—In the years 1809 and 1810 they were not fished so much as in the years after the removal of the stake nets; there were more fishings fished after the removal of the stake nets considerably than before.

Re-examined by Mr. *Keay*.

The tacksmen of the fishery employed the best means in their power to catch the largest number of fish?—Certainly.

He would not abstain from using boats, if they would be useful?—Certainly not; if boats were employed, of course there would be more fish caught.

MINUTES OF EVIDENCE

Taken before the Committee on the

BILL

For the more effectual Preservation and Increase of the Breed of Salmon, and for regulating the Salmon Fisheries, throughout *Great Britain* and *Ireland*.

Ordered, by The House of Commons, to be Printed,
31 *May* 1827.

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REPORT

FROM THE

SELECT COMMITTEE

ON

BRITISH CHANNEL FISHERIES;

WITH

MINUTES OF EVIDENCE,

AND

APPENDIX.

Ordered, by The House of Commons, *to be Printed,*
16 *August* 1833.

676.

Jovis, 6° die Junii, 1833.

BRITISH CHANNEL FISHERIES.

Resolved, That a Select Committee be appointed "to inquire into the present State of the British Channel Fisheries, and the Laws affecting the Fishing Trade of England, with a view to their amendment, and to report their observations thereupon to the House:"

And a Committee is appointed, of

Mr. John Halcomb.
Right Hon. Henry Goulburn.
Sir John Rae Reid.
Mr. John P. Plumtree.
Captain Dundas.
Mr. C. T. Tower.
Mr. Edward Curteis.
Sir Henry Willoughby.
Lord Viscount Althorp.
Mr. Stewart Marjoribanks.
Sir Edward Knatchbull.
Sir Thomas Troubridge.
Mr. Frederick North.
Mr. George Evans.
Mr. Hughes Hughes.
Sir James Graham.
Captain Elliot.
Right Hon. John C. Herries.
Mr. Bonham Carter.
Lord Viscount Lowther.
Mr. Ralph Bernal.
Mr. Alderman Thompson.

Ordered, That the Committee have power to send for Persons, Papers and Records.

Ordered, That Five be the Quorum of the Committee.

Veneris, 7° die Junii, 1833.

Ordered, That Sir Richard Vyvyan, Sir Charles Lemon, Mr. Edward Stanley, Mr. James Halse, Mr. John Collier, and Mr. Charles E. Rumbold be added to the Committee.

Martis, 11° die Junii, 1833.

Ordered, That Mr. John C. Bulteel, Mr. John Henry Scale, Mr. B. L. Lester, Sir John Johnstone, Mr. John H. Hawkins, Mr. William Pinney, Mr. Joseph Marryatt, Colonel Anson, and Mr. Jasper Parrott, be added to the Committee.

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REPORT.

THE SELECT COMMITTEE appointed to inquire into the present State of the BRITISH CHANNEL FISHERIES, and the Laws affecting The FISHING TRADE of *England*, with a view to their Amendment, and to report their Observations thereupon to The House; and to whom the several Petitions from *Emsworth*, *Brixham*, *Havant*, *Langstone*, *Bedhampton*, *Farlingdon*, *Plymouth* and *Bosham*, complaining of Distress, were severally referred;—HAVE, pursuant to the Order of The House, proceeded to examine into the Matters to them referred, and have agreed to the following REPORT:

FROM the late period of the Session at which Your Committee was appointed, they have been unable to extend their inquiry beyond the various Fisheries in the British Channel connected with such places on the Coast between Yarmouth in Norfolk and the Land's End in Cornwall, as have more immediately pressed upon their attention; but from the nature and extent of this Inquiry, they have reason to believe that they have obtained much useful information as regards the principal causes of distress which at present affect the several Channel Fisheries connected with the English Coast, and which they think it important should be submitted to the earliest consideration of the House, and of His Majesty's Government.

It is with great regret Your Committee have to report that they find this large portion of the British Channel Fisheries, and the various interests with which they are connected, to be generally, in a very depressed and declining state; that they appear to have been gradually sinking since the Peace in 1815, and more rapidly during the last eight or ten years; and that the Capital employed in these Fisheries does not yield a profitable return; while the number of vessels and boats, as well as of men and boys employed, is much diminished; and the Fishermen and their families who formerly were maintained by their industry, and enabled to pay rates and taxes, are now, in a greater or less degree, dependent upon the Poor-rates for support.

Evidence:
Cornwall, 485, 2786.
Folkestone, 572, 589, 779, 1037, 1080.
Dover, 895, 1151, 1210.
Hastings, 1225, 1231, 1403.
Torbay, 1461.
Harwich, 1617, 1782, 2047.
Barking, 1939.
Brixham, 2113.
Emsworth, 2374, 2448.
Yarmouth, 2703.
Generally, 1209, 1513, 1678.
268, 572, 1038, 1081, 1151, 1208, 1403, 1513.
589, 779, 1210, 1213, 1227, 1230, 1617, 1783, 1798, 2377.
376, 2339, 2448, 2511.

Among the causes which, in the opinion of Your Committee, have tended materially to produce this depression, and which still continue to affect it, they beg leave to call the attention of the House to the following, as those which appear to be immediately susceptible of remedy; namely, the extensive interference and aggressions of the French Fishermen on the coasts of Kent and Sussex; the large quantity of Foreign-caught Fish illegally imported and sold in the London Market; and the great decrease

and comparative scarcity of Fish in the Channel. To these several points Your Committee will address their observations separately; premising that there are also others of minor importance, some of which refer only to particular branches of the Fisheries, and upon which they will afterwards remark.

1. *Interference of the French Fishermen.*

IT is in evidence before Your Committee, that for a long time past, and up to the present period, the Fishermen from Calais, Boulogne, Dieppe, and other places in France, have been accustomed to fish with large Fleets of Fishing Vessels upon the Kent and Sussex Coasts, frequently within half a league of the Shore, and occasionally much nearer; and in the Bays and shallow waters, in which it is particularly necessary for the preservation of the Brood of Fish, that such as frequent those waters during the Breeding Season, should not be disturbed, or their young destroyed before they have attained maturity. That the French Fishing Vessels have greatly increased since the Peace, there being now between 200 and 300 sail out of Boulogne only, and they are more numerous, and of a much larger tonnage than those of our own countrymen upon that Coast, being generally manned with about double or triple the number of men usually employed in the English Vessels, and carrying nets and fishing gear of a much larger and heavier description than those used by our own Fishermen. That in consequence of this superiority on the part of the French, the English Fishermen coming in constant competition with them, have sustained so great injury, and such frequent loss and damage of their nets and fishing gear, especially in the Herring and Mackerel Seasons, which are the harvests of Fishermen, that they have not only been unable to earn a livelihood as they used to do by their trade, but have in some instances been wholly ruined, or have withdrawn altogether from their pursuit: while the French Fishermen continuing upon our Coast, and sometimes not returning into their own Ports during the whole period of the Herring or Mackerel Seasons, make a constant practice of selling their cargoes of Fish at Sea, and of shipping them into Carrier-boats coming from the Thames and other parts, and into boats which board them in the Bay of Dover and elsewhere on the Coast, for the supply of the London Market. It has also been proved to Your Committee that in the other seasons of the year, when the French employ themselves in fishing with hooks and lines for Turbots and other Sea-fish in the Channel, they are used to come in great numbers every morning from Boulogne and other places, into the English Bays, before they commence fishing, and there drag with nets for Bait in the shallow waters, close upon the Shore, taking and destroying an immense quantity of the young and unsizeable Fish at those periods of the year when the French are not permitted to fish in the Bays upon their own Coast*, and when the English Fishermen are accustomed to leave as much as possible their Breeding-grounds for Fish undisturbed. This last-mentioned practice Your Committee find is also the cause of great injury to the English Fishermen, and is much complained of as tending to diminish the quantity of Fish upon that Coast; and they cannot but remark, that while these proceedings are taking place upon the English side of the Channel on the part of the subjects of France,

574, 594, 678, 683, 746, 833, 840, 950, 1002, 1011, 1095, 1109, 1172, 1307, 1486, 1583.
747, 844, 1008, 1110, 1112, 1129, 1234, 1351.
849, 906, 938, 945, 1024, 1030, 1146, 1291, 1349, 1353, 2166.
677, 748, 753, 833, 840, 950, 1011, 1084, 1172, 1307, 2669.
576, 835, 1308.
583, 842, 1003, 1095, 1115, 1150, 1168.
593, 597, 639, 649, 821, 1040, 1046, 1070, 1203, 1413, 1418, 1506, 1529, 1632, 1641, 1761, 1925, 1936, 2027, 2652, 2753, 2767.
940.

* An Ordinance of the French Department of Marine, dated 15 January 1829, and now in force, has been laid before the Committee, by which the French prohibit their fishermen from fishing with a certain species of net, supposed to answer to our trawl, or ground-nets, within three leagues of the shore from 15 April to 1 September, and within two leagues from 1 September to 15 April annually; which Ordinance is understood to be enforced against English fishermen also.

France, the Fishermen of England are not allowed to fish within three leagues of the French Coast: but on their approaching that limit have been warned off by the Revenue or Police Coast-guard Vessels in the service of the French Government, and told that they will not be allowed to fish within that distance of their shore. 654, 662, 801, 852, 927, 932, 980, 1023, 1131, 1295. 927, 1296.

Your Committee also think it right to observe, that great attention on the part of the French Government appears to be paid to the encouragement and extension of their Channel Fisheries, particularly as a nursery for their Seamen; for which latter purpose they require so large a number as 18 or 20 men to be carried on board each Fishing Vessel; and it is stated in evidence before Your Committee, that bounties are also granted in aid of their Fisheries. While to these causes, therefore, Your Committee attribute the greatly increased numbers of the French Fishermen, and observe the decrease and distresses of our own, they deem it their duty to suggest that all possible protection and encouragement should be promptly given to the English Fisheries, not only in justice to the parties engaged in them, but regarding them in a national point of view, as the most valuable source of supply to our Navy. 576, 835. 542.

Now, in order to remedy the grievances at present sustained by the English Fishermen from the interference of their rival neighbours as already mentioned, Your Committee are of opinion that Foreign Fishermen should be prevented at all seasons of the year from Fishing within one league *, or such other distance of the English Coast, as by the law or usage of nations is considered to belong exclusively to this country; so that the Fishermen of England may at least be placed upon an equal footing with those of Foreign States, as regards the protection afforded to them by their own country; and further, that all Foreign Fishermen should be required to observe, during the spawning or breeding season of Fish, all such Laws or Regulations as may be imposed upon the English Fishermen for the better preservation of the Spawn and Brood of Fish in the Bays, and shallow waters upon our Coast. To accomplish these objects, Your Committee recommend that His Majesty's Government be requested to give directions both to the Lords of the Admiralty and the Commissioners of His Majesty's Customs, that all Officers of Customs, and of the Revenue, and other cruizing vessels upon the Coast, may be instructed to prevent Foreign Fishermen from fishing within such prescribed distance of the Shore; to enforce the observance of the Laws and Regulations before mentioned, as well by our own people as by Foreigners; and to protect the English Fishermen from aggression at Sea. And Your Committee believe that if such instructions be promptly given, and effectually acted upon, and the same Officers be also directed to prevent the illegal importation of Foreign-caught Fish, as after mentioned, very great and immediate relief will be afforded to our Fisheries, more particularly upon the Kent, Sussex and Norfolk Coasts, while the London and other Markets of this country will be equally well supplied with Fish. Upon this latter point Your Committee having made minute inquiry, will more fully remark under the next head of observation; namely,

2. *Importation*

* The Committee understand that one league from the shore out at sea is considered to be the territory of the adjoining country, which seems to be asserted by the French and Dutch, and is acted upon by our Custom-house in their grant of Licences to go within that distance of foreign coasts. It seems also to be the principle on which our Legislature declares forfeited any foreign vessel within a league of our shore, having prohibited goods on board. (See 6 Geo 4, c. 108, s. 5.) Whether the league is to be reckoned from the shore, or from a straight line drawn from headland to headland, appears to be doubtful: the French and Dutch are understood to claim the latter, and it would be much more beneficial to our own Fisheries than the former.

2. Importation of Foreign-caught Fish.

BY the Statute 1 Geo. I. stat. 2, c. 18, (1714) intituled, "An Act for better preventing fresh Fish taken by Foreigners being imported into this Kingdom," reciting a former Act, 18 Charles II. c. 2, "against importing Fish taken by Foreigners," and that the same had been evaded "by the fraudulent practices of Persons trading in English Smacks and other vessels, who when they are off at Sea, buy great quantities of Fish caught by Foreigners, and import and market the same in this Kingdom to the great discouragement and impoverishment of His Majesty's Subjects, and the manifest detriment of the Fishery and Navigation;" the importation of Sea-fish of every description, (except Turbots and Lobsters, Eels, Stock-fish, Anchovies, Sturgeon, Botargo and Cavear,) "taken by, bought of, or received from Foreigners, or out of any foreign vessels," is prohibited under a penalty of £. 50, which prohibition is also contained in the Table of Prohibited Goods in the Statute for granting the Duties of Customs, 6 Geo. IV. c. 107, s. 52; and heavy penalties and forfeiture are by the same Statute and by the 6 Geo. IV. c. 108, imposed upon the parties, both Foreigners and British Subjects, who may be implicated in such transactions.

593, 639, 821, 954, 1040, 1071, 1103, 1203, 1363, 1413, 1418, 1506, 1529, 1632, 1641, 1689, 1761, 1925, 2077, 2652, 2767. 2758.

Notwithstanding, however, the prohibition before mentioned, Your Committee have been much surprised to find that a very large illegal importation of Foreign-caught Fish does in fact take place; and from the Evidence before them it appears that about one-third of the Fish supplied to the London Market is procured from Foreigners, including in that estimate the Turbots, Eels and Lobsters, which may be legally imported.

It is also proved to the satisfaction of Your Committee, that however secretly and to a less extent this practice may have formerly been carried on, it is only within the last few years that it has been practised openly, and without interruption on the part of the Government or Officers of His Majesty's Customs; and notwithstanding the Fishermen upon different parts of our Coast have made frequent complaints to the Custom-house Officers, and requested them to interfere and prevent this practice, yet from the answers which they have generally received, namely, "that if they could prove the Fish to have been purchased from Foreigners, the Custom-house Officers would then interfere," and from other information which Your Committee have received, they have reason to believe that the general omission to enforce these Laws has arisen from misapprehension of the provisions of the Statutes; and they think it probable that less attention has been paid to the subject by the Officers of Customs on the Coast, in consequence of the evasion of the Laws in this particular not being attended with any loss of Revenue to the State.

918, 1102

Your Committee, however, beg to remark, that the existence of the practice has been extremely injurious to the English Fishermen, not only by preventing such of them as live at a distance from London from sending their Fish, as they used to do, to the London Market; but also by inducing the French Fishermen to remain upon the English Coast, and thereby creating the destructive competition before mentioned as applicable to the Coasts of Kent and Sussex; and that if their supplying the English Markets was prevented, they would not continue upon our Coast. Your Committee, therefore, strongly recommend that effectual measures be immediately taken for preventing the continuance of this system, which they are of opinion may be easily done by proper instructions being given, as before suggested, to the Officers of Customs and of the Revenue, and other cruizing vessels upon the Coast, not to permit the transhipment of Fish out of Foreign Fishing Vessels into the Carrier-boats which now attend them for that purpose, nor to suffer such Fish to be

otherwise imported into this country. And Your Committee refer particularly to the Sections 2d and 5th of the Statute 6 Geo. IV. c. 108, which render forfeited any English Vessel engaged in such transhipment within four leagues of the Coast between the North Foreland in Kent and Beachy Head in Sussex, or within eight leagues of any other part of the Coast; and also render forfeited any Foreign Vessel having such prohibited articles on board, within one league of the Coast of this Kingdom, and not proceeding on her voyage; and they refer also to the pecuniary Penalties imposed by other Sections of the same Statute, and to the powers of seizure and proceeding before Magistrates, contained therein.

The practice complained of appears to prevail chiefly off the Mouth of the Thames, and upon the Coasts of Kent and Sussex, and to operate most injuriously during the Mackerel and Herring Seasons; and as the latter season will commence again in the end of September or beginning of October next, Your Committee desire to express their hope that the protection suggested may be afforded previously to the commencement of that season, and to point out its great importance in the present state of our Fisheries.

Upon the further question suggested by the complaint of our Fishermen, that they are much injured by the continued permission given to Foreigners to import Turbots free of Duty, Your Committee find that by the Statute before cited, 1 Geo. I. stat. 2, c. 18, s. 10, Turbots were allowed to be imported "duty-free," which permission appears to have been continued down to the present time by the various Statutes regulating the Duties of Customs. Your Committee have also felt themselves called upon to make minute inquiry, not only from the Fishermen whom they have examined, but also from London Fish Salesmen, and other disinterested Witnesses, in order to ascertain whether, if relief were afforded in this respect also to the English Fishermen, the Markets of this country would still be adequately supplied with this valued species of Fish: And Your Committee have to report, that according to all the Evidence which they have examined, and to which they beg particularly to refer, it has been proved not only that the English Fishermen will adequately supply the British Markets with Turbots, without increased prices, if Foreigners are prohibited from importing them, but that the alteration of the Law in this respect will tend very materially to revive the Fisheries connected with the Coasts of Norfolk and Essex, and also with those of Kent and Sussex, and will be of great value to our Fisheries in general. At the same time Your Committee would observe, that as the Turbot is considered to be a somewhat scarce Fish in the Channel, the chief supply of which appears to have been obtained for upwards of a century by this country from the Dutch, and is principally caught off the Coast of Holland, though in waters which are equally open to our own Fishermen, they think it would not be politic to prohibit the importation of Turbots by Foreigners until time has been afforded to enable the British Fishermen to prepare for making good the decrease of supply thereby occasioned; but that after that time the importation of Foreign-caught Turbots should be put under the same regulations as apply to other prohibited Fish.

1526, 1533, 1805, 2676.

1383, 1502, 1631, 1815, 1832, 1904, 1933, 2012, 2042, 2068, 2202.

1894.

Your Committee also desire to state, that they are fully satisfied that the further deficiency of supply to the London Market which will be occasioned by the strict enforcement of the Statute, as recommended in reference to other Fish at present imported contrary to Law, will immediately and without difficulty be made good by the English Fishermen; the injury resulting from the present system being principally sustained by them during the Herring and Mackerel Seasons, and there being a

sufficient number of Fishermen and Vessels upon our Coast to catch whatever quantity of Fish may be required for the supply of our Markets.

1891. Before quitting this branch of their Inquiry, Your Committee would also mention that the English Fishermen are not allowed to import any description of Fish into France or Holland; but they represent it would be of considerable advantage to them, if when driven into any Port of those countries or of Belgium by stress of weather or for repairs, they were permitted to sell a sufficient portion of their Fish to provide themselves with necessaries for their support;—an indulgence which it appears is permitted, though perhaps without legal sanction, to the Fishermen both of France and Holland, under similar circumstances, in the Ports of this country.

3. *Scarcity of Fish in the Channel.*

571, 863, 876, 917, 937, 943, 1032, 1154, 1357, 2114, 2355, 2740. IT has been proved to the satisfaction of Your Committee by the concurring testimony of Witnesses from all parts of the Coast, that a very great and increasing scarcity of all Fish which breed in the Channel, (not including Mackerel or Herrings, which are Fish of passage,) compared with what was the ordinary supply from 15 to 20 years ago, has long prevailed; and that operating prejudicially to the Fishermen at the same time that a continued fall of prices has taken place in the Markets, it is perhaps the principal cause of their distress.

496, 506, 705, 725, 776, 1274, 2170. Now, it has been strongly pressed upon the attention of Your Committee, and they think has been satisfactorily proved, that this scarcity of Fish has been occasioned by the great destruction of the Spawn and Brood of Fish, consequent upon the non-observance of the Laws which at present exist for their preservation, and by which the Fishing with Ground or Drag-nets within a certain distance of the Shore during particular seasons, or with Drift or Floating-nets at all seasons of the year, having the mesh of the net under certain dimensions, has been declared unlawful: And Your Committee are of opinion that such Laws have not been enforced solely by reason of the insufficient provisions which they contain for giving effect to their enactments, and for want of proper Officers being locally appointed as Conservators, or Inspectors, to enforce them.

The Statutes in question are the 3 Jas. I. c. 12, (anno 1605,) intituled, "An Act for the better Preservation of Sea Fish," which reciting that "Forasmuch as it is certainly known that the Brood of Sea Fish is spawned and lieth in still waters, where it may have rest and receive nourishment to grow to perfection, and that those who use Draw-nets, Nets with canvass, or engines in the midst of them, do, every day they fish, destroy the Brood of all sorts of Fish in great multitudes," provides, (sect. 2,) that "Every person who shall fish in any Haven, Harbour, Creek, or within five miles of the mouth of any Haven, Harbour or Creek, with any Draw-net or Drag-net under three inches mesh, viz. one inch and a half from knot to knot, or with any net with canvass, or other engine or device whereby the Spawn, Fry or Brood of Sea Fish may be destroyed, shall forfeit such Net and also Ten Shillings," to be recovered as therein mentioned; but permitting by another Clause the taking of Herrings, Pilchards, Sprats or Lavidaian, with Nets of a lesser mesh.

The 14 Charles II. c. 28, (1662,) "For regulating the Pilchard Fishery in the Counties of Devon and Cornwall," which enacts, (sect. 2,) "That from the First of June to the Thirtieth November in every year, no person shall take Fish in the High Sea, or in any Bay, Port, Creek or Coast of or belonging to Cornwall or Devon, with any Drift-net, Trammel or Stream-net or Nets, or other Nets of that sort, unless at the distance of one

one league and a half from the shore," under penalty of forfeiting the Nets or their value, and one month's imprisonment of the offender.

The 1 Geo. I. stat. 2, c. 18, (1714,) intituled, " An Act for the better preventing Fresh Fish taken by Foreigners being imported into this Kingdom, and for the better preservation of the Fish, &c." which after prohibiting the importation and sale in England of Fish taken by or received from Foreigners, as before cited, provides, (sect. 4,) " That the meshes of Nets used at Sea upon the Coast of England (except for Herrings, Pilchards, Sprats or Lavidaian,) shall not be less than three inches and a half from knot to knot," under the penalty of forfeiture of the Nets, and of £. 20, with power of imprisoning the offender.

And by the same Statute (sect. 7,) provision is made for preventing the sale of Fish under certain specified sizes, under a penalty to be recovered before one Justice.

And the 33 Geo. II. c. 27, (1759,) intituled, " An Act (among other things) to punish persons who shall take or sell any Spawn, Brood or Fry of Fish, &c." which provides (sect. 13,) " That no person shall kill or destroy, or knowingly have in his or her possession, either on the water or on shore, or shall bring to shore, or offer for sale or exchange any Spawn, Fry or Brood of Fish, or any unsizeable Fish, or Fish out of season," under the penalty of 20 *s.* and forfeiture of the baskets or other packages in which the Spawn or Fish shall be contained.

These Statutes, it is the opinion of Your Committee, should be revised; and that a Bill repealing such of the Provisions before-mentioned as do not relate exclusively to the Coasts of Devon and Cornwall, and enacting others in lieu of them, with better remedies for their observance, should be introduced in the next Session of Parliament; and Your Committee deem it essentially necessary for preserving the Spawn and Brood of Fish, that by such Bill the use of Trawl or Drag-nets in the Bays within one league from Low-water Mark, or in less than 10 fathoms water, should be prohibited during the months of May, June, July and August*, in every year, the same being the spawning or breeding season of the Fish, and before their young Brood become of sufficient size to take refuge in deeper waters; it being of the utmost importance, that during this period the Spawn and young Brood should not be destroyed or taken by Nets which drag upon the ground, although the Fish may at the same time, and in the same waters, be taken with Floating or Drift-nets of a proper sized mesh. And it also appears to Your Committee that Conservators or Overseers should be appointed for the purpose of enforcing the Act. 1240, 1250, 2123, 2744.

Upon this part of the subject Your Committee would also observe, that from the Evidence adduced before them, they have reason to believe that it would still further tend to increase materially the Breed and supply of Sea Fish in the Channel, if the above period of restriction were extended to the end of September or October, or even later, until the young Fish, as the cold weather approaches, retire from the Shallows and Breeding-grounds in the Bays into deeper water: But Your Committee having regard to the other means of occupation for Fishermen during this period of restriction, do not think it prudent, at least in the first instance, that the present practice of trawling in the Bays should be prevented beyond the time which they have before recommended; more particularly, because the Fishermen have comparatively little employment in the month 1241, 1446, 2137.

* From the French Ordinance, before cited, (See Note, p. 4.) it appears that they protect their Bays and Breeding-grounds from 15 April to 1 September yearly.

month of September, which intervenes between the Mackerel and Herring Seasons; but Your Committee desire to state that it has been proved to their satisfaction, that the same Boats may be beneficially employed in deeper waters beyond the prescribed limits during the period which they recommend for restriction; and that whatever loss, if any, may be sustained in that period, will be abundantly compensated by the increased quantity of Fish preserved.

In support of this opinion Your Committee would also refer to the Report and Evidence taken before a Select Committee of this House in the Year 1817 *, appointed to inquire into the State and Condition of the Fisheries on the South Coast of Devon, from which Evidence it appears, that in the year 1816 the Trawl Fishermen in the several Bays on the Coast of Devon, acting under the advice of the Hon. Mr. Vernon (now Lord Vernon), who then resided in that neighbourhood, tried the experiment, by mutual consent, of preserving their Breeding-grounds in those Bays undisturbed from the 1st of July to the 20th September in that year, the consequence of which was a greater abundance of Fish † in the ensuing season than had ever before been known upon that Coast, and the Fishermen were desirous that the restraint which they had thus voluntarily imposed upon their Fishing, should in future be enforced by Law.

By the Report of that Committee, it also appears that "they considered it had been clearly made out, that although in the reign of James the First the attention of the Legislature was particularly drawn to the preservation of the Spawn of Sea Fish, and attempts had been since made by subsequent Enactments to preserve the Fisheries on our Coasts, yet that much was still left to be done;" and accordingly, in the year 1819, in furtherance of the views taken by this Committee, a Bill was brought into this House "to prevent the Destruction of the Brood and Spawn of Fish ‡," by which Bill it was proposed that the Justices in Quarter Sessions, in every County, should appoint Conservators or Overseers of the Bays, Creeks and Arms of the Sea, for the preservation of Fish coming there to Spawn, and of their Brood or Fry, and generally for enforcing the Act; and that they should also appoint Fence days, or times for preventing fishing with Trawls or Drag-nets in such Bays or Creeks; and it was further proposed by the Bill to regulate the size of Nets, and Fish for sale, and to inflict Penalties for injuries done to Fishing Boats and Nets at Sea, with summary remedies by proceeding before a Magistrate. In the Committee on this Bill other Clauses were added, limiting its application to within one league and a half at Sea, and to restrain it from affecting the Fisheries in any Arm of the Sea, Estuary or River, or interfering with Private or Corporate rights. This Bill, however, was lost in this House upon the third reading; but again in the Session of 1822 was brought forward in precisely the same form §, and passed this House, but was afterwards lost in the House of Lords, in consequence only, as Your Committee are informed, of the late period of the Session at which it was introduced; and since that time no further attention appears to have been paid to this subject, but the evils which were then so much complained of have continued unredressed and increasing.

Your Committee would also refer, in further confirmation of their opinion, to the Extract from a Manuscript Treatise on the State of the Channel

* *See* Reports on Fisheries, "Devon and Cornwall," 1817, vol. 3, p. 113, in the Library.

† *See* the Evidence of Walter Smith, (*post*. 2134, *et seq*.) who was with Lord Vernon, in his Yacht, on 20 September 1816, and details the result of this experiment.

‡ *See* Collection of Bills, in the Library, "Fisheries," vol. 22, p. 587.

§ Idem. p. 601.

Channel Fisheries, by James Cornish, Esquire, one of the Witnesses examined; and to the Letters of that Gentleman and the Honourable George Vernon; all which are appended to this Report. Appendix, p. 145. Appendix, p. 149.

By such Legislative provisions as before suggested, and by their enforcement by the Officers of Customs, and of the Revenue and Government Cruizing Vessels upon the Coast, Your Committee are of opinion that an effectual remedy will be applied to the evil complained of, and a more abundant supply of Fish speedily secured; but in reference also to this part of the subject, they wish to notice,

4. *The Stow-boat Fishery, or Catching of Sprats for Manure.*

THIS Fishery, which prevails principally upon the Kentish, Norfolk and Essex Coasts, has been proved to Your Committee to occasion very extensive injury to the Spawn and Brood of Fish. The Nets used in it are of a very fine description, so small as "not to let a pen pass through," and enclose not only Sprats, but the Spawn and young Brood of all other kinds of Fish; and as these Nets are frequently drawn along the ground and in shallow waters during the Breeding Season, and in the winter months before the young Fish are gone into deeper waters, an immense destruction of the Spawn and Brood of Fish is the inevitable consequence; whilst from the almost unlimited demand for this species of Manure for Land, and there being a ready sale for all that can be procured, this branch of Fishing has greatly increased, and there are at present from 400 to 500 Boats engaged in Stow-boating on the Kentish Coast only, which remain upon the Fishing-grounds frequently for a week together, not for the purpose of catching Sprats, or any other Fish to be sold as Food in the Market, but until they have obtained full Cargoes of dead Fish for the purpose of manuring the Land. 725, 855, 860, 869, 1057, 1186. 708, 1183. 860, 869.

Now, from the very destructive nature of this Fishery, its being of modern introduction, and considering also the almost boundless extent to which a demand for its produce may be carried, if the system be permitted to continue without restriction, Your Committee have been inclined to question whether its further prosecution ought not to be entirely prevented; but upon the best consideration which they have been able to give to the subject, they recommend that at least it should not be permitted to be carried on with Ground or Drag-nets, between the 1st day of April and the last day of November in every year, nor with Drift or Floating-nets in the Bays during the Breeding Season, namely, from the 1st day of May to the last day of August, within a league of the Low-water Mark, or in less than 10 fathoms water; nor at any other time with Nets of so small a mesh as is now generally used.

5. *The Licensing System.*

BY the Statute 6 Geo. IV. c. 108, at present in force "for the Regulation of Customs," Vessels and Boats of certain descriptions, as well those employed in Fishing as others, are required to be licensed *; and a discretion is vested in the Commissioners of Customs authorising them to grant or to refuse such Licences, and to prescribe within what distances of the English Coast they shall be respectively employed: a system which has heretofore occasioned great complaint on the part of the Fishermen, as well in respect of the narrow limits (generally four leagues) from the English Coast within which they have usually been restricted in their Fishery, as also in respect of the Fishermen and others who apply for Licences

* *See* the system fully detailed in the Evidence of Mr. Robilliard, the Surveyor of Customs.

Licences being rendered dependent upon the opinion of the Local Officers of Customs and their private Report to the Board in London, whether the party applying was suspected of Smuggling, and therefore not to be deemed a fit person to be licensed; or, in other cases, to be favoured with an extension of his Licence to within a league of the Foreign Coast.

These Regulations, as practically acted upon by the Board of Customs until a very recent period, Your Committee believe have been very injurious to the Fishermen and Boatmen generally upon the Coasts of Kent and Sussex, not only because many valuable Fishing-grounds lie beyond the prescribed limits and were thus abandoned to Foreigners, but because the system was liable to unfair partiality on the part of the Local Officers of Customs; while the Securities required to be given by the parties applying for Licences have been found to be oppressive and difficult to be obtained: And, inasmuch as the Owners of Foreign Boats could not be placed under similar Regulations, but have continued at all times the free exercise of their right to traverse all parts of the British Channel from Shore to Shore, not only have great advantages of Fishing and of intercourse between this Country and France been, in the opinion of Your Committee, unnecessarily abandoned to the subjects of the latter Country, but the desired protection to the Revenue of this Country against Smuggling has not been obtained, by reason of the natural effect of the Licensing System being to cause the use of Foreign Vessels exclusively, whenever a smuggling transaction was to be undertaken, which would subject the Owner of an English Vessel not only to the forfeiture of the Vessel, but also to the penalty of his Bond.

696, 1135, 2223, 2617.

691, 694.

Your Committee, however, have been glad to find that the Board of Customs have lately extended the Fishing Licences generally to within a league of the French and Dutch Coasts, and thus the principal cause of complaint in reference to this subject has been removed; but still the system of giving Bond continues, and the parties applying for Licences remain liable to the secret Report, upon suspicion only, of the Local Officers of Customs, by which their applications may be and frequently are refused. Your Committee therefore, after having examined the Surveyor of Customs, Mr. Robilliard, whose duty it is to superintend the Licensing Department of that Establishment, and having inquired particularly as to the necessity of the system from the most respectable and intelligent Witnesses conversant with its effects, deem it their duty to report, that in their opinion the continuance of the present system of Licences is injurious and oppressive to the Fishermen, and unnecessary for the protection of the Revenue, and that the same ought to be abolished; and they recommend that all Fishing Vessels and Boats should be allowed to fish at Sea as extensively as may be consistent with the rights of Foreign Countries, subject always to the forfeiture of the Boat, and such further penalty and punishment of the offender as are now by Law inflicted in the event of the Vessel or Boat being employed in Smuggling; but that the Owners should not be required to give Bond or to find Sureties for their good conduct in this particular, which Your Committee believe imposes a serious difficulty upon the poorer classes of Fishermen, and in the opinion of every Witness who has been examined by Your Committee, may be safely dispensed with.

40.

6. *Inland Carriage of Fish.*

A LARGE proportion of the Fish caught upon the English Coast being supplied by Land Carriage to the London and Inland Markets, and it being desirable to lessen as much as possible the expense of such Carriage, with a view to extend the supply of Fish Inland, and to render better

returns

returns to the Fishermen for the quantity of Fish so supplied, Your Committee are of opinion that it would greatly assist the Fishing interests if Carriages, laden with Fish only, were exempt from the payment of Turnpike Tolls, in addition to the relief which is at present afforded to them when travelling with Post-horses, of exemption from the Post-horse Duty. Your Committee have some reason to believe that such exemption from Toll was formerly allowed to Fish Carriages travelling to and from Market, and it has been so stated by one of the Witnesses examined; but Your Committee have not been able to find any Statute to that effect. 784, 1316, 1332, 1544, 1754. 1335.

This exemption, if granted, would particularly relieve the Fisheries at Yarmouth, Harwich, Dover, Folkestone and Hastings, and increase their supply of fresh Fish, particularly of Mackerel (which requires quick conveyance) to the London Market.

7. *The London Fish Market.*

YOUR Committee have also examined the Clerk of the Fish Market at Billingsgate, and some Salesmen and Fishmongers who frequent it, in reference to the present state of the supply of Fish to that Market, and the Regulations under which the Market is conducted; with a view to ascertain, if possible, whether any improper Monopoly or Regulations exist affecting the supply of the Market, or tending either to increase the price of Fish to the Consumer, or to lessen the fair profits of the Fishermen; but Your Committee do not feel that they have fully investigated the subject, although, from the Evidence which has incidentally come before them, it has not appeared that any such Monopoly or injurious Regulations exist, either in the mode of supplying the Market or in the sale of Fish.

It appears, however, to Your Committee to be desirable that a more efficient remedy than at present exists should be provided to enable the Clerk of the Market to prevent the sale of Fish in an improper state to the Public, there being now no other remedy than the forfeiture of the Fish, and the expensive and dilatory proceeding by indictment. Your Committee, therefore, recommend that a Clause should be inserted in any Bill which may be introduced upon this subject, inflicting a pecuniary penalty for this offence, recoverable by summary proceeding before a Magistrate, and to be mitigated at his discretion. 1722, 1726.

8. *Tithes of Fish.*

IN the progress of this Inquiry it has been also brought under the notice of Your Committee that Tithes of Fish caught at Sea, and brought on Shore, are in some parts of the Coast, particularly in Cornwall and Norfolk, demanded and paid, but they are complained of as burthensome to the Fishermen; and the legality of the claim is generally questioned, though it is said to have been established in Courts of Law. No Evidence however has been offered to Your Committee to enable them to form any satisfactory opinion upon this subject. 299, 2691.

9. *The Emsworth and other Oyster Fisheries.*

IN reference to the Petitions which have been laid before Your Committee respecting the Oyster Fisheries in the Harbours of Emsworth and Langstone in the County of Hants, and Bosham in the County of Sussex, Your Committee find that not only in those Harbours but in others, a practice generally prevails, and which appears to be of recent introduction, of

persons coming in Fishing Smacks * from a distance to dredge for and carry away the young Brood of Oysters, and other Shell-fish, found in Harbours, to the great damage and destruction of the Oyster Beds, and the Brood of other Fish there, and to the serious injury of the Fishermen and inhabitants of the neighbourhood; and it appearing to Your Committee that such practice is also unjust, inasmuch as the Oyster Beds in those situations are generally known to have been formed by the labour and industry of the Fishermen and inhabitants of the neighbourhood, or their ancestors; thus affording to them a beneficial source of employment upon which they have been accustomed to rely, and in which therefore they ought to be protected; Your Committee have examined the several Statutes for regulating Oyster Fisheries, namely, the 31 Geo. III. c. 51, and the 48 Geo. III. c. 144, by which latter Statute they find that it is rendered unlawful for any persons so to dredge, or fish for and carry away the Brood of Oysters in any Oyster Fishery being private property; but that the provisions of the first-mentioned Statute, which were to the same effect, and applicable to all Oyster Fisheries, yet appear to have been rendered less extensively operative than was intended, by reason of an exception contained in it in favour of all persons who were "lawfully entitled to take Oysters" in such Fisheries; and which therefore practically restricted the operation of this Act to such Oyster Fisheries only as were private property. Your Committee therefore recommend, and think it would be attended with much public as well as local benefit, and tend greatly to preserve and increase the supply of Oysters, if the provisions of the before-mentioned Statutes were extended to all Beds or Layings of Oysters and other Shell-fish, (not being private property,) situate in any Harbour upon the Coasts of this Kingdom; and that it should be declared unlawful to take and carry away any Oysters from such Beds of a less size than are fit for food, that is to say, of less than two inches and a half in width, or to fish for Oysters in such Beds at any time between the first day of May and the last day of August in every year, or during such other time as should be fixed in reference to any particular Harbour, according to the season in which the Oysters there become fit for food; such seasons, and all necessary regulations for those Fisheries, being determined and approved by the Magistrates of the County or District in which they are situate, and enforced by Conservators or Officers to be locally appointed for the purpose.

2541, 2549.

Additional Regulations for the purpose of protecting the other Fisheries in the Harbours of Emsworth and Langstone, as regards the catching unsizeable Fish, Fishing at improper Seasons, and stopping or priming with Nets the Riths or Channels in the Harbour, as proposed in the Evidence of Charles Mant, Esquire, and alluded to in the Petition from Langstone, Your Committee are of opinion may be beneficially adopted and introduced in any Bill hereafter to be brought forward on this subject.

2541, 2544.

See Appendix, p. 142.

10. *The Devon and Cornwall Pilchard Seine Fisheries.*

THESE Fisheries appear to Your Committee to be of great importance, and to have received the early attention and protection of the Legislature. They have lately suffered great depression and decrease, and are now carried on at a loss in consequence of a Bounty of 8 *s.* 6 *d.* per hogshead upon Pilchards exported having been taken off by our Government about five or six years ago, at the same time that a heavy Duty upon Pilchards imported

264.

278, 472.

* 2387, 2535, 2563, and *see* the Letter of Mr. Brooking, from Dartmouth, Appendix, p. 150.

imported into the Neapolitan Territories (which is the chief Market for this Fish) has been continued, and increased to 18 *s.* 2 *d.* per hogshead. This Duty amounted in the last year to about £. 10,000, and the amount of the Bounty formerly allowed by this Government, if calculated upon an average export of 30,000 hogsheads, would amount to £. 13,000 per annum. 359. 273, 330.

The Pilchards are a small Fish, very similar to the Herring, and are only found upon parts of the Devon and Cornish Coasts, where they come in large shoals, generally in the beginning of August or September, and again in November or December; care being requisite for the protection of these Fisheries, that the shoals of Pilchards when coming towards the Coast into shallow waters, are not broken or diverted from their course by Fishing Vessels using Floating or Drift-nets within a considerable distance (restricted by Act of Parliament, 14 Chas. II. c. 28, to a league and a half) from the Shore; the non-observance of which Act constitutes at present one of the principal grounds of complaint of the parties interested in these Fisheries. The Pilchards caught are immediately salted or pickled, and exported to Foreign Markets, chiefly in the Mediterranean, where they are much esteemed: they were formerly exported to our West Indian Colonies.

The number of Boats at present engaged in the Pilchard Fisheries (including both the Seine and Drift Boats) on the Coast of Cornwall, are proved to be about 1,000, giving employment to about 3,500 men at Sea, and about 5,000 men and women on shore; and before the withdrawal of the Bounty, the number of persons so employed is calculated to have been double the present amount. It is also considered that a greater number could not have been beneficially employed in these Fisheries, with reference to the limited average quantity of Fish to be taken. 221, 235, 239.

Now, in order to relieve the various parties interested in these Fisheries, it appears to Your Committee, in the first place, to be extremely desirable to obtain, if possible, a reduction of the high and increased Duty levied by the Neapolitan Government, but into which subject Your Committee forbear to enter fully, as they understand it is at present a matter of negotiation between that Government and our own; they think it right however to state, that the Witnesses whom they have examined upon this point, concur in opinion that the Duty so imposed occasions a material check to the Trade in Pilchards with that part of the Mediterranean to which nearly one half of the annual export has usually been consigned; and that some concession on the part of this Country to procure relief from this Duty, would be amply compensated by the benefits that would be conferred on the Fishermen and Merchants engaged in that Trade.

Your Committee would further observe that the Neapolitan Duties also affect materially the Yarmouth Herring Fishery, and the Export Trade in Cod Fish from Poole, and are found very oppressive in those Ports. 2036.

In the next place Your Committee recommend that the provision of the Statute 14 Chas. II. c. 28, which enacts, "That no person or persons shall in any year, from the first day of June till the last day of November, presume to take Fish in the High Sea, or in any Bay, Port, Creek or Coast of or belonging to Cornwall or Devon, with any Drift-net, Trammel, or Stream-net or Nets, or any other Nets of that sort or kind, unless it be at the distance of one league and a half at least from the respective Shores," be duly enforced, and that in such Bill as may hereafter be brought into the House in reference to the Channel Fisheries, a power of summary conviction before the Magistrates in Petty Sessions, with sufficient penalties to secure the observance of this Law, may be inserted,

and Conservators appointed to enforce it. From the Evidence adduced before Your Committee, and referring also to the written statements respecting this Fishery which have been laid before them, and are included in the Appendix to this Report, Your Committee find that the Pilchard Seine Fishery is greatly injured by the continual infraction of this Statute of Chas. II. by the Drift-net Fishermen, who fish generally far within the distance prescribed by that Act: and it is represented to Your Committee * that this may be effectually prevented if instructions were given to the Revenue Cutters at present stationed upon that Coast, to compel the Drift Boats to keep at the proper distance from the Shore; and that it will be satisfactory to the parties aggrieved if this protection be afforded to them from the first of August to the middle of September annually, a request, as it appears to Your Committee, so reasonable and easy to be complied with, that they cannot but recommend its adoption.

2784, 2797.

11. *The Harwich Fisheries.*

YOUR Committee regret to state that they find the Fishing Interests at Harwich in a state of great decay and distress, which the Witnesses attribute chiefly to the want of Capital at Harwich, and to their principal Fishery for Cod Fish not yielding a remunerating price, in consequence of their being unable to compete in the London Market with the Fisheries more recently established at Barking, Gravesend and other places in the River Thames, under circumstances which do not appear to Your Committee to justify the hope that material relief can be afforded by any measures which they are able to suggest.

The prohibition before recommended against the importation of Foreign-caught Turbots appears to Your Committee to be the only measure which may tend to relieve the Harwich Fisheries; as the principal part of the Turbots now imported are caught by Dutch Fishermen off their own Coast, but in those parts of the Channel to which the Fishermen of Harwich have ready access.

1618, 1783, 1798. It appears that within the recollection of Witnesses, 74 or 75 Fishing Smacks used to sail from the Port of Harwich, but that they are now reduced to 10, and of those, three are at present for sale.

12. *The Yarmouth Fisheries.*

THE Fisheries of Yarmouth appear to Your Committee to be in a comparatively prosperous state, but suffering much in their Herring Fishery from the heavy Duty levied at Naples upon Herrings exported thither, being 16 *s.* per barrel, which for the last three or four years has amounted to a prohibition, and consequently none have been exported to that country; though it is proved that if this Duty were reduced, the exportation to Naples may be estimated at from 10,000 to 12,000 barrels annually.

2637, 2719.

2640.

The Fishermen of Yarmouth also complain of the injury they suffer, particularly in the Herring and Mackerel Seasons, from competition with the French Fishermen, and from the illegal importation of those Fish, especially Mackerel, when caught by Foreigners, not being prevented; this they earnestly request may be done, and it has already been recommended by Your Committee. The propriety of prohibiting, in future, the importation of Foreign-caught Turbots, free of Duty, as injurious

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* 2796; and *see* Mr. Pearce's Letter in the Appendix, p. 154.

injurious to the Fishermen and Merchants of Yarmouth, has also been pressed upon the attention of Your Committee, and they are of opinion that the suggestion which they have before made in reference to this topic, will, if adopted, prove peculiarly conducive to the future welfare and prosperity of the Fisheries connected with this Port.

A minor cause of grievance, as affecting the Fishing interests connected with Yarmouth and Lowestoff, upon the same Coast, has been also represented to Your Committee; and it appears that for several years past the Owners of Fishing Boats belonging to those places have been compelled by the Officers of Customs there to pay the sum of 6*d.* per head per month for every man on board each vessel, as a contribution to the support of Greenwich Hospital. This they consider as paid by them unjustly, inasmuch as they represent, and which Your Committee believe to be true, that no such payment is required from Fishing Vessels at other Ports, nor from the same vessels, which are occasionally employed and pay this Duty at Yarmouth, when employed at Scarborough and Whitby in Yorkshire. It is represented to Your Committee that the reason assigned for collecting this money from the Fishermen of Yarmouth and Lowestoff is, that they cure their Fish (principally Herrings) on board, as soon as they are caught, and therefore that they are not fresh Fish, but must be considered in the nature of a Cargo imported. If however this reason be correctly stated, Your Committee cannot refrain from expressing their opinion that it appears to them to be a strained construction for the purpose of including these poor Fishermen under the denomination of "Merchant Seamen," a class to which they appear not fairly to belong, and in order to compel them to contribute to a Fund from which they can never be entitled to receive benefit. Your Committee therefore recommend that this imposition be further considered, and unless some better reason can be assigned for its continuance, that the parties be relieved from it. A large proportion of the men so charged are stated to Your Committee to be Agricultural Labourers, who are taken on board the Fishing Vessels during the Herring Season to assist in pulling and hauling in the Nets.

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The practice of Stow-boat Fishing for Sprats, before noticed, and which prevails extensively upon this Coast, is also the subject of much complaint; as also the collection of Tithes upon the Fish caught at Sea, both Herrings and Mackerel; and upon which Your Committee would remark that the Tithes are collected by the Clergyman according to the number of Fish caught, and amount generally to between £. 2 and £. 3 per annum in respect of each Boat; but although called a Tithe, the Clergyman's share appears not to be more than one-eightieth part, after deducting the Boat's Expenses.

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2700.

Your Committee further think it right to notice, that on interrogating a Witness from Yarmouth as to the effect that would have been produced to their Mackerel Fishery, if the provisions of a Bill lately introduced into Parliament for the better Observance of the Sabbath were adopted by the Legislature, they are informed and believe that the effect of those provisions would be to destroy, or, in the words of the Witness, to "completely annihilate" that Fishery, by reason of the perishable nature of Mackerel. They therefore recommend this opinion to the future notice of the House, and as applicable to all other Mackerel Fisheries in the Channel.

2649.

The Fishing Vessels belonging to Yarmouth are stated to be about 100 sail, averaging from 40 to 50 tons each, besides about 50 or 60 Vessels annually hired from Yorkshire during the Herring Season; and

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2623. the number of men employed at Sea are computed at between 4,000 and 5,000, besides a great number to whom employment is also given on
2621. Shore. The Capital embarked is estimated at about £. 250,000.

The Fishery at Lowestoff, nine miles from Yarmouth, employs about
2729. 70 Fishing Boats of 40 tons each, with a proportionate complement of men.

IN conclusion, Your Committee desire to state that time has not permitted them the opportunity of examining Evidence upon the Petitions which have been referred to them from Plymouth and Bosham, farther than as the Evidence furnished from other places may bear upon the complaints from these. Neither have they been able to pay attention to the communication addressed to them in reference to the Fisheries connected with the Scilly Islands, which will be found in the Appendix; nor to inquire into the state of our Channel Fisheries connected with other places than are mentioned in this Report and Appendix.

Your Committee also earnestly repeat their opinion, that the present state of our Channel Fisheries satisfies them that their interests have been too long neglected; and that it is of the first importance, as well to the Naval and Commercial prosperity of this Country, as to the local interests connected with the Fisheries, that the future welfare of these valuable establishments should receive the further attention of Parliament, and of His Majesty's Government in particular: and they beg leave to submit the various suggestions contained in this Report to the early and serious consideration of this House.

16 *August* 1833.

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MINUTES OF EVIDENCE.

Veneris, 14° *die Junii*, 1833.

JOHN HALCOMB, ESQUIRE, IN THE CHAIR.

Mr. *Nicholas Robilliard*, called in; and Examined.

Mr. *N. Robilliard.*

14 June 1833.

1. ARE you the Surveyor of the Custom-house for the Acts of Navigation?—Yes.

2. Is it the practice of the Custom-house, under the laws of this country, to grant licences to fishing vessels or boats?—Yes, it is.

3. To all fishing vessels and boats, or only to some in particular?—All vessels require licences, except square-rigged ships; so that whether they are for fishing or any other trade, except vessels of that description, they have that licence.

4. It does not depend on their being employed in fisheries?—Not at all; the same vessels have licences to fish or for coasting, or any other trade the vessels apply for; so that they employ them in any trade they see fit.

5. Is the trade mentioned in the licence, the occupation?—Yes, it is.

6. As the designation of the person applying?—Yes.

7. Have you the form of the licence by you?—No, I have not; I have something very much like the form, the application for the licence.

8. Under what Act of Parliament do you at present grant licences to boats and vessels in the Channel?—The 6th Geo. 4, c. 108.

9. There is a new Bill now before the House of Commons, in which the laws respecting licences are embodied?—Yes, there is.

10. Have you any form of licences here?—No, I have not.

11. Have you any form of notice of application from the parties?—Yes, I have the form here in which the application is made for a licence; there is only one form for vessels, and a form for boats, and a form for the boats of vessels.

12. Are those applications prepared under the direction of the Customs?—That is sent from the out-ports.

[*The Witness delivered in the following Papers.*]

CERTIFICATE for obtaining Licences for Ships or Vessels.

No.

Port of

No. 1.

THESE are to certify, that the ship or vessel called the of master, is intended to be employed in the trade from to , her bottom is work, she has a bowsprit, her length from the fore part of the stem to the aft side of the stern-post aloft is feet inches, according to the mode prescribed by law; her breadth from outside to outside above the mainwales is feet inches; and she admeasures tons: which vessel is subject to forfeiture unless licensed by the Commissioners of Customs.

This vessel is years old licensed before, and valued at pounds; owned by who has been convicted of smuggling concerned suspected to my knowledge.

The Tide-surveyor is directed to add anything further he may know of the character and pursuits of the owner and master; and the Collector and Comptroller are not to fail to make the most strict inquiry, and report whether the owner has ever been guilty or suspected of smuggling, with the grounds of their suspicion.

Given under my hand, at the Custom-house, this day of in the year 183

Mr. *N. Robilliard.*

14 June 1833.

No. 2.

CERTIFICATE for Licensing Boats belonging to Ships or Vessels.

No. .

Port of

THESE are to certify, that an open boat belonging to the of master, is built, and her length from the fore part of the stem to the aft side of the or aloft, is feet and inches, her extreme breadth from outside to outside is feet and inches, and her depth from the upper part of the plank next the keel to the top of the upper strake feet and inches; her plank is thick, and timbers square; built for rowing with oars, and fitted with sails: which boat is subject to forfeiture unless licensed by the Commissioners of Customs.

The Tide-surveyor is directed to add anything further he may know of the character and pursuits of the owner and master; and the Collector and Comptroller are not to fail to make the most strict inquiry, and report whether the owner has ever been guilty or suspected of smuggling, with the grounds of their suspicion.

This boat is years old, licensed before, and valued at pounds; owned by of who ha been convicted of smuggling concerned suspected to my knowledge.

Given under my hand, at the Custom-house, this day of in the year 183

No. 3.

CERTIFICATE for Open Boats.

No. .

Port of

THESE are to certify, that an open boat, called the of built for rowing with oars, and fitted with sails, the property of of is intended to be used for between and not exceeding leagues; is bottom; her length from the fore part of the stem to the aft side of the stern-post, is feet and inches, her extreme breadth from outside to outside is feet inches; her depth from the upper part of the plank next the keel to the top of the upper strake feet inches; her plank is inch thick, and timbers square: which boat is subject to forfeiture unless licensed by the Commissioners of the Customs.

The Tide-surveyor is directed to add anything further he may know of the character and pursuits of the owner and master; and the Collector and Comptroller are not to fail to make the most strict inquiry, and report whether the owner has ever been guilty or suspected of smuggling, with the grounds of their suspicion.

This boat is years old licensed before, and valued at pounds; the owner ha been convicted of smuggling concerned suspected to my knowledge.

Given under my hand, at the Custom-house, this day of in the year 183

No. 4.

No. .

Custom-house, London, 25th February 1817.

Gentlemen,

HAVING, with reference to the Act 56 Geo. 3, c. 104, taken into consideration what further regulations, with a view to the protection of the Revenue, it might be expedient to adopt in respect of licences to be granted for navigating ships, vessels and boats, we have come to the following Resolutions; viz.

1st. That fast-rowing boats requiring a licence, on account of their slight scantling, length, &c. be limited to a distance not exceeding four leagues from the English coast, between the North Foreland and Beachy Head, nor exceeding six leagues from any other part of the coast, nor exceeding 20 leagues along the coast.

2d. That open boats constructed for sailing and rowing, and requiring licences, on account of their depth, &c. and being under 15 tons, be not allowed to exceed four leagues from the coast between the North Foreland and Beachy Head, nor eight leagues from any other part of the coast, nor above 50 leagues along the coast.

3d. That open boats and vessels above 15 tons requiring a licence, be not allowed to exceed the like distance from the coast, nor more than 70 leagues along the coast.

4th. That open boats or open vessels of whatever tonnage, requiring a licence on account of their construction or equipment, be not allowed to go foreign, except boats belonging to vessels, which vessels are allowed to go foreign.

5th. That decked vessels and boats under 15 tons, and not square-rigged, requiring a licence, be not allowed to exceed four leagues from the English coast between Beachy Head and the North Foreland, nor 12 leagues from any other part of the coast, and that along the English coast they be restricted to 70 leagues, unless employed in pleasure only.

6th. That decked vessels above 15 and under 70 tons, not square-rigged, and requiring a licence, and intended to be employed foreign, be restricted to 50 leagues along the French coast, or to certain ports on the said coast; but such vessels to be allowed on the English coast a coasting trade generally.

We

We acquaint you with the above resolutions, and direct you to govern yourselves accordingly, in making out and transmitting certificates of survey for licences, and in reporting on applications for the same, and you are to observe that the value as expressed in the certificates, be taken when the vessels are completely fitted for sea, including fishing gear, &c. That the class in which each vessel falls, in conformity to the numbers of the aforegoing resolutions, be expressed at the top of the certificate, and that those for open vessels under 15 tons, be transmitted on the form for boats, and when above that tonnage, that the word "open," be written on the certificate.

Mr. *N. Robilliard.*

14 June 1833.

We further direct you, whenever you transmit a certificate for a licence for any vessel or boat, to state whether the owners have been convicted of, or are known to be concerned in smuggling, stating the grounds of the latter; and to observe that your returns of licensed vessels and boats be transmitted at the usual periods on whole sheets, and that the particulars according to the form, be so entered therein, that they may be bound up with the returns from other ports in a book.

BY the Commissioners for managing and causing to be levied and collected, His Majesty's Customs and other Duties.

No. 5.

21st August 1827.

READ an application of the owners of fishing smacks residing at Barking in Essex, referring to the 21st section of the Act 6 Geo. 4, c. 108, restricting the number of hands to be employed on board vessels of the above-mentioned description, and representing the impossibility of employing such vessels, especially in the trawl or net fishery, if the provisions of the law in this respect are strictly enforced.

Read also the reports of the collectors and comptrollers at the principal ports in England, and at the ports in Scotland, at which places fishing vessels are fitted out, and of the surveyor for sloops on the subject. And as it appears that vessels of the above-mentioned description were in the practice, previous to the passing of the Act above-named of carrying a greater number of men than is now allowed, and that without such additional aid it would be impracticable to carry on the fishery, especially the trawl or net fishery; and as it would appear also that the limits allowed by the general order of 25th February 1817, are not sufficiently extensive for the pursuits of the fishermen.

Resolved, That the strict provisions of the law should not be enforced against vessels of the above description, provided that they be *bonâ fide* employed in fishing and assisting ships in distress, and the owners and masters thereof be of good character; and that such fishing vessels be also allowed such an extension of the limits, provided by the general order of 25th February 1817, as may be necessary to enable them to pursue their lawful occupation.

And Ordered, That the surveyor for sloops do govern himself accordingly in reporting upon applications from owners of fishing vessels, to be allowed an additional number of hands, or an extension of limits, who will not fail to make due inquiry into the character of the owners and masters; and submit to the Board such addition and extension in each case, as the nature of the vessel's employment may appear to require, and such a restriction in the period for which the licence should be granted as may guard against any abuse of the indulgence.

Transmit copy of this minute to the collectors and comptrollers of the out-ports for their information and government, in forwarding to the Board applications from the owners of fishing vessels at their respective ports, and enjoin the said collectors and comptrollers to be careful in their inquiries as to the characters of the owners and masters, so as to prevent this indulgence from being granted or availed of to the prejudice of the revenue.

Copy of this minute is also to be transmitted to the Boards in Scotland and Ireland, with a request that similar directions may be given to the officers there.

On the Service of the Customs.

Collector and Comptroller at

No. .

No. 6.

Gentlemen, Custom-house, London, 3d April 1817.

HAVING had under consideration a petition of sundry owners of boats employed in the mackerel fishery, in the county of Cornwall, stating the limits within which their vessels are restricted, are insufficient to enable them to carry on the fishery, and praying an extension thereof.

We acquaint you that we have resolved so far to relax the provisions of our General Order of the 25th February last, as to allow the boats in question employed in the mackerel fishery, and having their nets on board, or going to, or returning from market with fish, to navigate to the distance of 20 leagues from the English coast, and along the coast from Portsmouth to the Land's End; or, if belonging to the ports of Penzance and St. Ives, from Portsmouth to Bristol; but that they be restricted from touching at the islands of Guernsey or Alderney, or at the Caskets.

And you are to govern yourselves accordingly, in making out and transmitting certificates of survey, in order to obtain licences for the boats in question.

Mr. *N. Robilliard.*

14 June 1833.

No. 7.

No.

Gentlemen,

I HAVE it in command to transmit for your information and government, the enclosed copy of a Minute of the Board, dated the 21st instant, containing regulations for allowing vessels employed in fishing and assisting ships in distress, an extension of limits, and a greater number of hands than at present authorized under the Act of the 6th Geo. 4, c. 108.

I am, Gentlemen, your obedient servant,

Custom-house, London, 30 August 1827.

13. Is this form of application drawn up and prepared under the direction of the Customs, or is it a form required by the statute?—No; it is a form drawn in consequence of the Act, and you will find in the margin of that form an order as to the character of the party.

14. That is the Custom-house regulation, but not prescribed by the Act?—It is the Custom-house regulation for the working of the Act.

15. It is not copied from the Schedule?—No, not at all.

16. This form refers to vessels, to open boats belonging to vessels, and other open boats?—Yes, to fishing boats which are navigated on the coast of England.

17. Those are the only three forms used?—Yes, the only three forms.

18. Are not licences granted for different distances from our coast to different vessels?—Yes, there are, according to circumstances.

19. Now what regulates the discretion of the Customs in respect to those distances?—The Customs have been invariably in the habit of granting boats to people of good character as far across the Channel as they could go, that is, within the limit of the country: they grant the extension of limits to within a league of the French and Dutch coasts.

20. You mean to say that that is the invariable practice now?—To people of good character.

21. Without regard to trade?—I am speaking of open boats; all vessels above 15 tons are allowed to go far out.

22. What is the distinction as to those vessels?—They are allowed foreign trade.

23. Without a licence?—With a licence.

24. When you talk of one league from the French coast, to what sort of vessels do you apply that?—To all boats.

25. Without reference to the decks or tonnage?—Not at all; the licensing system has become of late years very general; the Board have worked more on the character of the parties than the size of the vessel.

26. What difference is there between vessels under and above 15 tons in obtaining a licence; you say if she is above 15 tons, she has a right and does not require a licence to go to that extent?—No, what are not allowed to go within a league of the foreign coasts are the open boats.

27. But above 15 tons?—They are allowed to trade.

28. And to touch the very shore?—In fact, to trade in the harbour.

29. That is by the Act of Parliament, that under 15 tons a vessel cannot have a licence to enter foreign ports?—And it is a Custom regulation as far back as 1817.

30. It is not absolutely prescribed by Act of Parliament that vessels of 15 tons are to be limited to the foreign ports?—No.

31. What regulations do you advert to when you state there were regulations so long ago as 1817?—I have put a paper in as to that.

32. Are you aware whether that restriction to boats from going within a league is a Custom-house regulation, or specially provided for by Act of Parliament?—It is a Custom-house regulation only.

33. That is the extension; formerly it was within four leagues only of our coast?—In the narrow part of the Channel now, without special application, between the North Foreland and Beachy Head.

34. Between what part of the coast is it that it is the practice of the Custom-house, to boats in general, to grant only four leagues from our coast?—From the North Foreland to Beachy Head.

35. On what part of the coast do the Custom-house grant licences for a greater distance, namely eight leagues?—All other parts of the coast.

36. You mean to go within four leagues of our own coast?—Not to go beyond that.

37. Are they limited as to distance from our coast from one point, or are they at liberty

liberty to go the whole length of the whole coast, so that they do not go four leagues from shore?—They are limited to 50 leagues or 70 leagues, according to the size.

38. The extension of licences to within one league of the French coast is granted indiscriminately to all persons of good character applying?—Yes, indiscriminately.

39. Whether boats or vessels?—Yes; there is a printed order of the Board in August 1827.

40. The licences have been extended considerably within the last few months, have they not?—Within the last six months.

41. Since last summer?—Yes.

42. What has been the late extension of licences to which you have just adverted: you say the licences have been extended within the last six months; what do you mean by that?—To the limits granted of going within one league of the French and Dutch coast.

43. What extension; is it extended to more vessels, or what?—I suppose it has been extended to considerably more than 100 boats in Kent and Sussex.

44. Which before had not these licences?—They had not; they were licensed to eight leagues and four leagues; now it is within one league of the French and Dutch coast.

45. There are exceptions to the rule?—Yes; we work on the character of the party.

46. Who gives the character, what certificate of character is required, and from what quarter does it emanate, as to the respectability of the party applying?—The tide-surveyor makes it up, and the collector and comptroller are ordered to report on the character.

47. Licences beyond these distances are only given on special application, with character?—Yes.

48. What security is taken from the owners of these vessels, or the persons employed in them; do they give a bond with sureties?—No, there are no sureties; it is only the owner who gives the bond; it is the law fixes it to that; the owner gives the bond.

49. Does that apply to all vessels and boats?—Yes.

50. What is the penalty inflicted; it is against smuggling?—Yes; the value of the vessel, if out of distance, which makes it the subject of forfeiture; if they are found out of their limits they have been detained; very few have been condemned.

51. If found out of distance they are liable to the forfeiture of the vessel?—Yes.

52. And the bond is an additional penalty?—To the amount of the boat or vessel.

53. In addition?—To the loss of the vessel.

54. And also a money penalty to the amount of the boat or vessel?—Yes.

55. As far as you know, are these regulations for the purpose of preventing smuggling?—Yes, they are.

56. Are you aware if the French boats come across the whole breadth of the Channel?—Yes, I am.

57. Is it not apparent to you that smuggling may be, and perhaps you know is carried on in French boats?—I believe there is very little doubt of that; in fact some have been captured and condemned, some of the French boats, several of them.

58. Do the French give any licences; do they come without licence?—I do not know.

59. You are not aware of that?—No.

60. Do you know by what right the French custom-house boats seize our boats when they find them within the limits of the French coast, is it on account of their being without a licence?—I am not aware that they have seized any of our boats for being on their coast.

61. Are you aware if the French have an armed police to keep our boats at any given distance from their shore?—No; there have been two or three, we almost call them fights, between the oyster people on the coast of Jersey, from their pretending that English boats went within their limit.

62. You do not know anything of it on that part of the French coast opposite to Kent?—No, I do not.

63. In granting these special licences, if they may be so called, to the owners of boats, to go a greater distance than eight leagues, are you guided in your discretion

Mr. *N. Robilliard.*

14 June 1833.

by your own local comptroller of the customs, your chief officer on the coast?—We are led principally of course by the character sent from the collector or comptroller of out-ports, where application is made.

64. They come through him?—They are forwarded from him to the Board.

65. He certifies his approbation, or otherwise, of the grant?—No; he certifies as to the character of the parties.

66. Is this document which you have handed in, the form of certifying the character upon such application, and does the collector and comptroller put their signature to the document when it comes to you?—They put their initials there, and forward it in a letter, with their remarks on it.

67. You say the boats have licences granted between the North Foreland and Beachy Head of four and eight leagues; is that at the option of the parties, or does it depend on the size of the boats, or what makes the difference between granting it for four or eight leagues?—These boats are allowed, for instance, suppose the boat is licensed to trade between Yarmouth and Portsmouth, she would be allowed to trade or fish between Yarmouth and Portsmouth, not beyond four leagues between the North Foreland and Beachy Head, eight in the others.

68. The four leagues are merely confined to the narrow part of the Channel?—Yes.

69. How long is it since the Customs have extended their licence?—I think very nearly 12 months.

70. Was it from any representation from different parts of the coast?—Yes, it was; there was a representation from Dover as to the difficulty of getting despatches across; they could often get despatches across when steam packets and sailing vessels could not.

71. You mean representations from Hastings and other parts of the coast?—Yes; in consequence of which a great number of the Hastings boats are fishing under the extended limits.

72. Did Hastings take the lead in their representation?—No, the representation from Dover was considerably before Hastings; they were not fishing-boats; we have had them from several other places.

73. When the officer of the port certifies as to the character of an individual who applies to be licensed, does he assign (in case he does not recommend him) any reason, or merely say he is a man that he cannot recommend?—The printed form of application shows that.

74. You have put in a paper, dated the 25th of February 1817, which purports to be regulations made by the resolutions of the Board of Customs for granting licences as to different vessels and different distances along the coast; has there been any new set of resolutions framed for that purpose since the last Act of the 6th Geo. 4, c. 108?—There have been those, which you have before you.

75. But any general resolutions?—No, there has not, (except where there have been partial changes,) that are still in force.

76. Besides the change which you have lately mentioned, of granting an extension of limits to within one league of the coast, were there not some changes made five or six years ago, as to the number of men who were allowed to go in vessels of a certain description?—It is contained in the document of the 1st of August 1827.

77. Is that permission still in operation?—It is still in operation.

78. Do these two papers, that of the 25th of February 1817, and that of the 21st of August 1827, contain regulations, with the addition only of the privilege lately granted, of going within a league of the opposite coasts?—There are many orders independent of those, which are partial; many in the north; the Scarborough boats are allowed a farther extension, north and south, but they are merely orders on applications to the Board, on applications which have not been put in print, and which not being general, I have not brought with me. There is another printed document there about mackerel boats on the west coast of England.

79. Is there any printed form of regulations of the Customs for all different descriptions of vessels as to licences, open to the inspection of the public at different ports along the coast, so that people who wish to employ vessels, may know by going to the respective custom-houses, what they have to expect, if they choose to make application?—A copy of every printed order is sent to the other custom-houses.

80. Is there any order that these resolutions be placed on a board, so that the people may go and see, and know what rights they may acquire, if they go and choose to ask for them in a proper manner?—I am not aware.

81. Would

81. Would it not be a beneficial thing if all the regulations made from time to time by the Board of Customs were consolidated and put together, so that the public might have ready information from them at different ports?—There could be no sort of objection; it would be a great help to the trade in general.

82. Have there been any printed notices given of the extension the Customs were ready to give to different kinds of boats, so that it may be known to the public that people of good character may have that extension: has it been generally known?—I do not believe there is a port in England in which it has not had some case of extension.

83. But if the people engaged in fishing have had an intimation of the extension of licences, has any public notice been given at different ports, so that all parties may be informed of the Customs being ready to make that extension to people of good character?—I do not believe it has; I cannot say what is done at the out-ports; I have not seen them there.

84. You are not aware of a general order from the Custom-house, London, to the out-ports, desiring such information to be given?—No.

85. If that order had been given, would it have passed through your department?—No, through the secretary's department.

86. To the best of your belief it has not?—No.

87. Can you tell the Committee from your own knowledge whether any licences to any considerable extent have been in the habit of being granted to a fisherman to go within one league of the Dutch coast as well as the French?—They go within one league of the French or Dutch coast.

88. There are, practically speaking, boats that go within one league?—They may go.

89. Are these applications as frequently in the same proportion for the French as for the Dutch?—Yes, I think so, according to the ports they come from: Harwich, for instance, or Yarmouth; they would all ask for Dutch.

90. Then it is open to the fishermen of Harwich to pursue the fishery on the Dutch coast as well as the Dutch themselves?—Yes.

91. Supposing a boatowner on the Kentish coast to apply for liberty to go within a league of the Dutch coast, opposite the Norfolk coast, would it as a matter of course be granted?—I see no objection, always bearing in mind that the character was right, keeping smuggling in view; the character is the principal thing on which we go.

92. The vessels in all the ports of the southern coast of England may, if they think fit, have licences to go to the North Seas or Dutch coast, taking care not to go within one league, with a view to the smuggling regulation?—Yes.

93. Do you happen to know whether in point of fact the Dutch and English boats do not fish exactly on the same ground?—I do not know.

94. Do not the forms of licences vary as to different parts of the coast?—No, we have the same form.

95. You fill up this form with different distances?—Yes, they are filled up with different parts of the continent, according to where they come from.

96. Not as to the distance from shore four or eight leagues, but as to the line of coast?—The officers of the ports apply for that, according to the trade where the party wishes to go, the party selects his trade according to the regulations of the Board.

97. The licence is made out conformably to that?—It is made out and sent to the port, when the party calls and gives a bond, and takes it up.

98. Are any fees paid on issuing this licence?—None whatever, except for vessels; the stamp for a bond for vessels is 5 *s.*, but for the boats the stamp is on blank paper.

99. Is the certificate of character from the inhabitants of the place generally, or from officers of the Customs?—The character comes from the Customs in that document.

100. If a party applies with a certificate of character by two inhabitants, do you refer it to the Customs, and is the opinion of the Custom-house officer a ground for granting it, or otherwise?—Of course the character is frequently signed by the inhabitants.

101. Then you refer it again to the Customs, the certificate of the Customs is the ground on which they act?—It must go to the Customs; they must send up a description, the printed document is for making out a licence from the port.

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102. But as to character, is it the character of the Custom-house officer or of the individual that you rely on?—It depends a great deal on circumstances.

103. They have some special licence for mackerel boats?—Yes; whether it is mackerel or any other, it all goes under the character of fishing; the licences are that a man should not have his vessel detained for mackerel fishing, it being said that the licence is for turbot fishing. There had been an order for mackerel, a special licence.

104. Now, with reference to the importation of fish; can you tell the Committee what fish are imported by France, being imported duty-free?—Turbot and lobsters; I have nothing to do with receiving the duties.

105. As to these licences when they are granted, have you instances of an appeal against the decision of the collector of the Customs as to character by the parties?—Frequently.

106. What is the course pursued on that?—The party sends forward certificates as to character, on further inquiry taking place it has turned out that a smuggler has been convicted of smuggling, and all those things, four, five, six and 12 years, and since that he has not been suspected, the man has a licence sent to him as a man who had nothing to do with smuggling; having been a smuggler but not being now one, makes all the difference.

107. Have you known, in point of fact, licences granted contrary to the wish expressed by the Custom-house officer on the coast?—We have had several altered in this way from explanation being taken; indeed I think I sent one yesterday, for a man that had been convicted, but for the last three years was not suspected, nor was he now suspected.

108. Suppose your Custom-house officer reported that he was suspected, and did not think him a proper person, would he have it?—We must believe the officer till it is contradicted.

109. Is it a matter on which you inquire further?—No, we receive the matter as it comes in the first instance; if the party feel aggrieved, he applies.

110. Then it does undergo further inquiry?—Yes.

111. If the man's character is good at the time application is made, he is not refused an extension of licence?—Certainly not.

112. Inasmuch as the granting licences to people of good character, accompanied with a 5*s.* stamp, for large vessels, is a great inconvenience to British fishermen, which French fishermen have not to encounter, and an impediment; can you see any justifiable ground for the system, that all persons being permitted to fish within these limits of the French coast, unless under the interdict of having been smugglers, or it being signified to the Custom-house that such a man having been a smuggler, is a man of bad character, shall be interdicted from so doing, and liable to forfeit their vessels if found there?—As the law now stands, the thing must be paid; the licence for a fishing vessel is just the same as the licence for a vessel for the coast or foreign trade, or in any other way; the licences are invariably the same; it is merely wording them in a different manner.

113. How long does the licence last?—The extended licences are for two years.

114. It is the same thing whether that is extended to four leagues from the land or to the French coast, as to the time?—Where the usual limits are only granted, that is, the four leagues, they are not limited to time at all.

115. But they pay the stamp?—Yes, for vessels, but not for boats; the same money is paid for a stamp by a fishing vessel as by any other vessel.

116. Every boat must have a licence?—Yes, except the boats of square-rigged vessels; they do not require licences.

117. They did require it at one time, if built beyond certain dimensions?—All above 14 feet did require.

118. Any craft, having a licence, may go a fishing?—Any craft may go fishing.

119. Would she require a licence for fishing specifically?—Not at all; in the licences of the boats or vessels that go a fishing, 99 out of 100 are allowed to go coasting, and the foreign trade.

120. Suppose the licence does not expressly specify fishing, may a vessel have a licence to fish?—Not unless she is allowed to fish; if the party wishes to apply for a trade in which he wishes to employ his vessels in.

121. A licence does not expressly specify for fishing, does it?—Yes.

22. Must every fishing vessel have a peculiar licence to enable it to fish?—No, it is the same as any other boat or vessel, except that he has fishing in it, which almost

almost every other vessel has also, in case they wish to fish; most people ask for everything they think of.

123. You allude to boats wanting to carry across despatches from Dover to France; what licence would they have; a fishing licence?—No; a licence to that effect; the licence is made out to the effect the party wants to employ his boat for.

124. Is that a permanent or temporary licence, for carrying despatches?—They are limited to one or two years; everything that is granted beyond the usual routine is limited, for fear of the document getting into possession of a smuggler.

125. A boat with a common licence cannot proceed beyond a certain distance from the coast to fish?—No.

126. Is she obliged to have a specific licence to go beyond that distance?—If they wish that, they give up that licence and get another licence to go; you destroy one.

127. What is the general extent of licences granted for fishing from Torbay westward towards the French coast; do they go within a league?—They apply specially, and you have their character.

128. What fishing trade is it that employs boats above 15 tons that require licences?—There are a great many boats of more than 15 tons; a great many about St. Ives.

129. Not in the narrow part?—Very few in the narrow part are 15 tons.

130. Do you say that the licences for four or eight leagues are granted indiscriminately, without reference to character?—No; if their character is bad they are not allowed to go above two leagues; where the character comes in with a special application we take it as of course; if it comes with a bad character, it is quite a different thing, we work on the document.

131. Are licences for four leagues or eight leagues ever granted without a certificate from your own legal officer?—We cannot make a licence without having a certificate.

132. They are never granted without a certificate from your own legal officer?—No.

133. Not even for four or eight leagues?—No.

134. Are they not four or six leagues between the North Foreland and Beachy Head?—No.

135. Who sends up the characters of the persons applying?—The collector and comptroller of the port, and the tide-surveyor.

136. On what grounds do the Custom-house sometimes give four leagues and sometimes give six leagues?—It depends entirely on the character of the party; a Deal boat, where his character is good, has permission to fish within six leagues, which brings us within a league of the French or Dutch coast.

137. A Dover boat; what has that?—The same.

138. A Folkestone boat?—The same.

139. Open boats cannot get licences at all?—Yes, they all have licences; they cannot navigate without a licence unless they are square-rigged ships.

140. Do they get the same extent of licence, the open boats, or is it a peculiar licence they get; or do you mean that an open boat gets the same as a decked boat?—No, the form is different for a decked vessel from what it is for an open boat.

141. But as to the extent?—The extent depends entirely on the size of the vessel and the trade the party is employed in.

142. There are a class of boats not allowed licences at all, what is the size of the vessel?—I am not aware of any.

143. Are you sure of that?—Yes; I do not know one.

144. May there be such without your knowledge?—A licence might have been refused to a boat or a vessel of something that had been asked, which it was not thought proper to grant, but as to licences, the law says a vessel shall have it.

145. If a vessel of a certain size, a small boat, not a decked boat, makes application to the Custom-house for a licence, if that man's character is good, will she get it or not?—Certainly she will; she must have a licence; the only power the Board has, is to grant licences in the form they think fit for the protection of the revenue.

146. How do you account for the Custom-house refusing licences to boats of a certain size?—I do not think one has been refused.

147. You have stated that you do not know of any licence having been refused

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to a boat under a certain size?—No, I am not aware of one; in fact it cannot be refused.

148. May it be without your knowledge?—It may.

149. As you have stated that vessels belonging to persons of bad character may only go two leagues from our shore, can you say whether that is under a clause of the Act of Parliament, or a Custom-house regulation?—A Custom-house regulation.

150. Grounded on the words you have quoted from the Act of Parliament, that all vessels shall have licences subject to such regulations as the Board may think fit?—Yes, they are, as nearly as I can recollect the words.

151. The licence describes the vessel?—Yes.

152. That is accompanied with the bond?—That bond is the value of the vessel.

153. You take a bond?—Yes, from the owner; the law calls on the owner; formerly the owner had to produce two approved sureties, that has been done away with.

154. Who makes the application to the Custom-house; from whom does this form when filled up come; who makes the application; does the individual send up the form, or the collector of the customs?—The individual applies to the officers at the port, and they forward the document.

155. The individual never sees the character that is sent up, it does not go into his hands as a matter of course, he has not the power of sending the thing himself?—No, it is sent by the customs.

156. He has not the power of negociating, but the character is given of him by the comptroller or whoever sends it up, has he?—Not that I know of.

157. Can you say whether the fishermen granting security, with two other respectable sureties, to a given amount, would not equally protect the revenue as a licence granted by the Custom-house?—I think it would protect the revenue the same; but how would you regulate as to where they are to fish.

158. If the man gives security, are you able to say whether that sort of security, without inquiring into the character, would not be sufficient to protect the revenue?—As to security, it would be better than it is now; for nine-tenths of the owners of these boats have not the means of paying the bond; those who go smuggling. We have had it in Hastings, where paupers have been owners of the boats, and minors in a great number.

159. If security were substituted for reference to character, would it not equally answer the purposes of the revenue?—My opinion is, that so far as regards the security and the payment of the bond, it would be better than now.

160. Do not several masters act as mates of their own vessels, under the authority of paupers, merely getting licences for the pauper to command the vessels?—No, I am not aware of that.

161. Where licences are granted, is the limitation as to distance mentioned in the licence?—Yes.

162. Do you mean to say that every boat of every size has a licence?—Every boat requires a licence, except the boats of certain ships; I have had boats licensed as low as eight feet.

163. Of any length and any breadth?—Yes.

164. Supposing a boat gets a license to fish two leagues or four leagues from shore, what controls the distance, are they to board her and ascertain if her licence extends so far and no farther?—Some boats have been found at a greater distance than they were licensed, they have been brought into port in consequence, and detained, and seized in fact.

165. And the Custom-house crews seize them as a matter of course?—Yes, if they find them beyond their limits, and bring them in.

166. What follows, does it undergo investigation?—Yes, report is invariably made, of course.

167. Are you not aware that for many years many boats on our southern coasts have constantly been fishing out of their licence, and infringing the law day after day, and yet have not been seized?—I believe that has been very often the case; the boat would be forfeited if she was found there.

168. But it is not often the boats are condemned?—It must be an aggravated case to make it so.

169. But still by law they are liable to forfeiture?—Yes.

170. How are you to ascertain the distance?—By the bearings of the land.

171. You

171. You say you believe, though you cannot speak of your own knowledge; do you not know that many boats fish beyond the limits of their licence, and are those boats in the habit of asking for an extension of that distance, or do they without any consideration of the case, take a common licence for the ordinary distance?—What I alluded to were those who had ordinary licences, they have frequently been blown beyond their limits.

172. Do the proportion of these people endeavour to get their licences extended to a greater distance?—There can be no necessity for infringing it in the present system of licences, the system has been acted on for a considerable time, any man who sends up a good character may have the whole Channel, except the opposite league of the coast.

173. Reference having been made to one league of the opposite coast, is there any understanding you are aware of as to that league, that within a league of the coast is considered as belonging to the opposite country?—Yes, that is the idea.

174. Do the French come within a league of ours?—I believe they do. frequently.

175. These boats that go from the west country on the coast of France, for the purpose of getting oysters, do they require a peculiar licence for that?—No, not at all; they are decked, those vessels that go in the oyster fishery.

176. It only alludes to open boats?—All decked vessels above 15 tons are allowed to go as a matter of course, provided the character is fair.

177. Do they require a licence?—All vessels require a licence, except the square-rigged.

178. The character applies equally to a large vessel as it does to a small one?—Yes, it does.

179. There are a great number of craft that go on the river Thames and the Dutch coast, not to fish, but to take fish from the Dutch fishermen; do they require a peculiar licence, or their merely being decked vessels, does the general licence allow them to do so?—The only licence they have is a fishing licence, they come and bring this fish.

180. Do all fishing-boats, however small, all require licences to fish on the coast?—Yes, they do.

181. You have stated just now that you have never known an instance of a licence refused to vessels under a certain size as being too small, the Committee understand it has within these few days been refused to Deal boats, on the ground of their being under size, are you aware of that?—No.

182. The Committee have been informed that licences within these few days have been refused to Deal boats, notwithstanding most excellent characters have been sent up, are you aware of that?—No.

183. You mentioned some time ago, something with reference to differences that have arisen in Jersey and Guernsey, are those islands under different regulations of the Custom-house, or is that a licence from our English coast?—No, the same form is sent and used, it is sent from the Custom-house, as from any out-port here.

184. Are they under the London Custom-house, or do they exercise it without reference to you?—The licence goes from this Custom-house to those islands.

185. They cannot get them without getting them from you?—No.

186. But the application is made to the local port to which the boat belongs?—Yes, and the licence is sent, and the party gives the bond and takes the licence.

187. You were understood to say that some serious differences have arisen between our fishermen and the French in that neighbourhood?—I know nothing more than what has been seen in the public papers.

188. Is there any sort of difference in the character required before you grant a licence to a fishing vessel, or to a coasting vessel?—No, the same document is granted to all.

189. Is there any regulation as to the number of men and boys carried in the boats?—The law provides the number of men in the boats.

190. But in boats of the size you describe, the small boat, do you say in your licence, "to be navigated with so many on board?"—We have had several licences for boats, and exceeding what the law grants, given to men of good character.

191. In every licence you grant, is it mentioned in the licence that this boat is to be navigated by four men and a boy, or two men and a boy?—None; unless it is a special application for an excess of men.

 192. There

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192. There is no scale at all?—The law says, a vessel of a certain size shall have more men; and if they carry more, they are liable to seizure.

193. The Act of Parliament regulates what a vessel of a certain tonnage shall carry in the way of hands?—Yes.

194. If they want more, that is to be specified in your licence?—Yes.

195. In granting four leagues in preference to six leagues, does the difference depend on the character of the boatmen, or is there any other cause for it?—The four leagues are granted as a matter of course, when the character is good; it depends on the character of the boatmen, you would not allow the six unless there was a special application and a good character.

196. The character depends on what information you get at the Custom-house?—Yes.

197. Supposing the character to be good, and one man to apply for four leagues, and another for eight, and another for six, are they each entitled?—If the character is good, they would have what they apply for.

198. You before stated the only point that impeached character was, that the party had been convicted of smuggling; now you state that there is a difference in the application, and when a man applies for six leagues, you restrict him to four; do you mean to say that the point of character is solely confined to smuggling?—These licences are granted under what is called the Smuggling Act; when we speak of a bad character, it is meant of a smuggling character, it goes by the name of the Smuggling Act, the 6th Geo. 4.

199. There is no more difficulty in granting a foreign licence than granting four or six leagues?—It comes just in the same way, the thing comes up every day; we have sent upwards of 200 licenses off in a day from the office.

Mr. *Alfred Fox*, called in; and Examined.

Mr. Alfred Fox.

200. YOU reside at Falmouth, in Cornwall?—Yes.

201. Is the pilchard fishery the principal fishery on your coast?—Yes.

202. Are you an owner of what are called seines used in the pilchard fishery?—Yes, I am.

203. Are you an owner of a considerable property of seines used in the pilchard fishery?—Yes.

204. Will you have the goodness to state from what part to what part of the Cornwall and Devon coasts the pilchard fisheries are found?—From Dartmouth, along the south coast of Devon and Cornwall to Padstow, round the Land's End.

205. Are you able to state to the Committee the quantity, the average quantity of shipments of pilchards, as the result of a fishing season?—About 30,000 hogsheads.

206. Have the goodness to look at this statement of the shipments; is that a statement of the shipments of pilchards for 1832?—It is.

207. State to the Committee; there are two catchings in that year, a first and a second catching?—Yes.

208. What is the amount of the first and second catching?—The first catch was 24,464 hogsheads.

209. What was the second?—7,066 hogsheads.

210. What is the total?—31,530.

211. That was a large catching?—Rather more than average.

212. From what period of the year to what period does the pilchard fishery last?—It is very variable; sometimes it extends over three months or even more.

213. Do you fish during a continuance of fish on your coast, from the time they come till you see no more of them?—We fish generally for about three months, waiting for the fish.

214. What are the months?—We begin generally in the beginning of August.

215. When do you finish?—It varies; sometimes in October, this year we did not finish till December; the last catch took place on the 6th of December.

216. Is the pilchard a fish similar to the herring, and what difference is there?—It resembles that in size but not in quality, its taste is different.

217. Is it a fish preferred to the herring?—It is very much preferred, especially in Italy.

218. In its pickled or dried state?—Yes.

219. When you catch these fish, are they caught for pickling and drying and exporting?—Principally for both; but principally for drying, in a dry state.

220. You

220. You send at present the whole of your pilchards to Italy and the Mediterranean?—Yes, very nearly the whole.

221. Can you state to the Committee how many boats or vessels are employed in your fishery?—About 1,000 boats; not in the same fishery; I include in that number those who carry drift-nets, they are all in the pilchard fishery.

222. The seines consist of two large boats and one small one?—They do.

223. Those three boats carry two nets, called the stop-net and the tuck-seine?—Yes, they do.

224. The length of the stop-seine is 220 fathoms, or a quarter of a mile?—Yes.

225. Its depth is about 100 feet?—Rather less than 100 feet.

226. About 14 or 16 fathoms?—Yes.

227. The other net, called the tuck-seine, is about half the size of the other?—Yes, it is.

228. The meshes of those nets are very small?—They are.

229. In using those nets, three boats you have said are employed?—There are.

230. Does that include the boats which are called the draft-boats?—The draft-boats have nothing to do with that; they are quite exclusive.

231. Is that what is called a seine, consisting of three boats and two nets?—With other materials.

232. And each seine employs 16 men and two boats?—That is the case in most places, but not in all; sometimes more and sometimes less.

233. That is about the average?—Yes.

234. Altogether, how many men and boys; you reckon two boys a man?—Yes.

235. How many men do your seines on the Cornish coast employ?—Since the loss of the bounty, I think we employ about 3,500.

236. Now, do you also employ a great many hands on shore, both men and women?—A great many.

237. In curing and preparing the fish?—Yes; and in other respects, preparing and mending the nets.

238. And otherwise connected with the fishery?—Yes.

239. Do you think there are as many on shore as at sea, or more?—I think more; I cannot say how many, perhaps 5,000.

240. Can you tell what the wages earned by those men employed in the fisheries during that season amount to?—From 7 *s.* to 10 *s.* a week per man.

241. Have they, in addition to that, a share in all the fish you catch?—In almost all places.

242. I speak of your own?—They have a quarter of the gross part of the fish.

243. The whole produce of the fish caught is, with some exception, cured?—Yes.

244. Salted and pickled?—Yes.

245. Does the portion which belongs to the men, is that included?—Yes, it is salted by the owner.

246. And the owner pays them in money for their proportion?—Yes, after the fish are sold; I should say, with regard to one-fourth, it is not a fourteenth of the gross produce in many places, but the fourth, after deducting the curing charges; and in other places it is not so.

247. Now can you tell the Committee about the average share of a man for the season, of the fish caught?—It depends entirely on the success of the season; it varies now.

248. Supposing the season to be 30,000 hogsheads?—If there be 30,000, one seine may have a large shoal, the other may have none; from 25 *l.* to 10 *l.*; it varies.

249. You have sometimes known it 20 *l.* to a man for the season?—Yes.

250. They get one fourth of the produce?—Yes.

251. Does the average produce of a seine fluctuate very much?—It does, very much.

252. Is a considerable quantity of the fish caught consumed in the neighbourhood, or given away?—Yes, a great deal is given away, or sold at a low rate.

253. Is it a species of food the neighbourhood use, and find beneficial?—Particularly so.

254. Have the goodness to state at what price you sell them, if you do sell them to the people; about how much?—I think the average price would be 1 *s.* per 100; that might be stated as the average price.

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255. Do you not often sell them at 20 a penny?—Very often.

256. If some of your neighbours are inclined or have a desire to have a hogshead of fish, when cured, do you sell them sometimes?—Now and then, but not to a great extent.

257. Do you ever use pilchards for manure?—Yes, we do.

258. When there is a superabundance?—It almost always happens a certain portion of the fish is not fit to be put into cask; what we call soft fish, fish which are sick probably when taken.

259. The refuse fish you use for manure?—Yes.

260. Is it found beneficial as manure?—Yes, it is exceedingly so; superior almost to any manure.

261. Is there any duty on your exports?—None.

262. Was there formerly an *ad valorem* duty of 10 *s.* on every 100 *l.* worth?—Yes.

263. That has been taken off?—Yes, four or five years.

264. Was there a bounty of 8 *s.* 6 *d.* per hogshead?—Yes.

265. Which has existed for a long period of time?—Yes.

266. When was that taken off?—Five or six years ago.

267. Can you state if the taking off of that bounty has been attended with any material injury to the pilchard fishery?—Very material indeed.

268. In consequence of that, have you known many seines to be given up?—Yes, a great many have been cut up and used for covering; the nets are used for covering fruit trees.

269. And the seines abandoned?—Yes.

270. Suppose there were more seines used, is the supply of fish on your coast sufficient, so that more than the quantity could be caught, or is your fishing limited by quantity?—I think there were as many seines on the coast as could be usefully employed before the reduction.

271. But perhaps it is not so now?—No.

272. You stated the number of men employed now at 3,500; how many were employed during the existence of the bounty?—I should think nearly double as many; but I cannot say.

273. What was the amount of the bounty given; 8 *s.* 6 *d.* a hogshead?—In a catch of 300,000 hogsheads, it would be about 13,000 *l.*; the bounty of 8 *s.* 6 *d.* would be that.

274. The quantity was greater in those days?—Occasionally greater and occasionally less.

275. £. 13,000 would be the average expense to Government in shape of bounty?—Yes.

276. What was the object of that?—To encourage the fishery.

277. With a view to what?—With a view to create a body of sailors, as a nursery of sailors.

278. You have stated that the fish were all exported to the Mediterranean, to Leghorn and Genoa?—In Naples and Venice are the largest markets.

279. Are you able to state to the Committee what amount of duty on importation at Naples, that Government makes you pay?—Five ducats and 46-hundred per hogshead; that is 18 *s.* 2 *d.*

280. What is the selling price of a hogshead in Cornwall, and then in Naples?—The average price may be called 35 *s.* per hogshead in Cornwall.

281. What is it in Naples generally, when you have paid that duty; what is the selling price?—About 65 *s.*, rather more.

282. What is about the amount of the freight?—The freight is various, from 5 *s.* 6 *d.* to 7 *s.* per hogshead, according to the size and character of the vessel.

283. Have you lately tried the Calcutta market?—We have sent some pilchards to Calcutta, but we do not yet know the result.

284. Do you export to the West Indies?—We did during the war, when the fish were low.

285. You have sent to the West Indies formerly?—Yes, often.

286. Did they not take out one time a great portion of your pilchards?—Yes.

287. Can you tell why that ceased?—The advance in price, in consequence of opening the Mediterranean markets at the end of the war.

288. Is there a full demand in the Mediterranean for all the supply you can send?—Yes, at reduced rates.

289. In

289. In those markets have your pilchards a preference over all herrings and fish of that kind?—Yes.

290. Does your supply depend on the length of the Catholic Lent?—It does.

291. Is there a competition in the Neapolitan market for a small sort of Spanish fish?—Yes, there is.

292. Is there considerable competition in your trade among yourselves?—Yes, very great.

293. The owners of different seines compete with each other?—The exporters compete, I should rather say, than the carriers.

294. This small fish is pickled?—Yes, it is pickled in Spain.

295. You complain, the pilchard fishery complains, of paying duty at Naples?—We do feel it very much.

296. Has it the effect of throwing, now the bounty is off, the seines out of employ?—I certainly think it has that tendency.

297. Has it that effect?—I cannot measure that effect; I have no doubt it has a considerable effect.

298. On your coast; do the fish on your coast pay tithes; is a tithe taken of them?—Yes, of pilchards, in some places, not in others.

299. In some places on your coast a tithe is demanded of the fish?—Yes.

300. And in others not?—And in others not.

301. Do you usually pay tithes for pilchards?—Yes, in some places. I could state some of the rates: at Mevagissey they pay 1 *l.* 13 *s.* 4 *d.* for every seine, per annum, and one-twelfth part of the share of the fish belong to the men.

302. In other places is there a money payment in lieu of tithes, or is it ever in kind?—It is never in kind.

303. It is always in a money payment?—Yes; it applies to two miles from Mevagissey; it is 10 *s.* per hogshead; in other places there are different rates and different modusses.

304. Is there a similar charge of 2 *l.* or 3 *l.* on a ship load at Mevagissey?—Yes, there is a charge of that kind.

305. For what is it?—For the attendance of some of the chief officers of the Custom-house, which is situated 14 miles from Mevagissey.

306. They come down to see the ship loaded?—Yes, they do.

307. But no duty is paid?—No.

308. What is the occasion for the officers?—There is no occasion for their attendance at all.

309. It is a fee?—Yes, it is.

310. They take it as a fee?—Yes.

311. If there is no duty payable, there seems to be no occasion for the officers to attend?—There is not any occasion, it is 14 miles from the Custom-house, it is within the port of Fowey.

312. Is that a charge which the Custom-house authorizes?—Yes, quite authorizes, I believe.

313. Can you refuse the payment of it?—I am not sure, we have not thought it right to refuse it.

314. The Custom-house sanctions it?—They certainly sanction it at Fowey.

315. The Custom-house have sanctioned it as a fee?—I am not sure that we might not get it off if we applied for relief; we have never applied for relief.

316. On what grounds is it paid?—The grounds are, that they are to be remunerated for their going so far from their homes to attend to the business of the Custom-house.

317. The vessels require a clearance?—Yes; but she might be cleared as we clear all vessels, coastwards.

318. It has nothing to do with the duchy of Cornwall?—No.

319. Is it in the power of the Custom-house officers to refuse to go to this port to clear the ship where she is lading?—No; they cannot refuse to attend their duty.

320. There is not a custom-house?—No.

321. It is a branch?—Yes.

322. Within the port?—Yes.

323. The Custom-house officers are compelled to go without an allowance for travelling 14 miles?—Perhaps they are not compelled free of compensation.

324. Do they get compensation from the Crown?—No.

325. Does it fall on the ship?—On the ship.

326. Would you have any objection to furnish the Committee with a statement of

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of the expense of the catch, carrying, putting on board, the freight, the duty at Naples, and the average price you obtain on them?—I could do that with pleasure.

[*The Witness was requested to forward such statement to the Committee.*]

327. You said what was called a seine consisted of three boats?—That is the case generally throughout Cornwall; but in St. Ives, a somewhat different practice prevails with respect to the seines.

328. As to the pilchard fisheries, what is the principal fishery on your Cornwall coast, is it in catching a large quantity of mackerel and herrings?—Yes.

329. You stated that formerly the number of men employed were nearly double of what has been done since the withdrawing of the bounty?—Yes.

330. Have you the least idea what is the diminution in the quantity of fish caught upon an average, you think the average is tolerably fair at 30,000 hogsheads now a year?—Yes.

331. What do you suppose were the average previously?—I think that from the year 1818 to 1824, probably the average was not, I speak at rather a guess, I do not think it was 10,000 hogsheads, though we then had the bounty; that was owing to the fish not coming on the coast, we had few for five or six or seven years.

332. What has been the state of the fish for the last three years, and the quantity taken?—The last year, 31,500; the year before, I think, it was 28,000; and the year before that, not quite so many.

333. Therefore, does there appear to you to have been a gradual increase of fish since those years when the bounty was taken off, does there appear since the reduction of the number of fishermen to have been a gradual increase of fish?—No, I think not.

334. You say the fishery has increased?—Yes; in 1829 we had not above 500 hogsheads; in 1828, we had, I cannot be sure, perhaps 20,000 or 27,000.

335. Do you remember a much larger catch than 35,000 hogsheads of fish?—No, I do not remember a much larger catch.

336. Do you ever remember 60,000?—I remember 60,000 or 80,000 hogsheads, when I was very young.

337. You have mentioned a quantity of fish of an inferior sort, or soft fish used as manure, being unfit to be sold?—Yes.

338. Is that fish caught at the end or the beginning of the season, the first or the second catch principally?—We have a larger quantity from the first catch, the fish are more oily and more tender, the scales are not so firm, and they are more liable to be bruised and become unfit for use.

339. Do the fish vary much in size?—Yes, they do vary in size; of the same season they vary.

340. Have the fish increased in size do you suppose, or diminished in size, during your recollection?—I can scarcely say; in 1815 they were very small, in 1816 they were very large, so they were in 1817; the larger the quantity generally the finer the fish.

341. Do you know the age of the fish?—The history of them is very little known.

342. Can you tell where the pilchards are supposed to breed; on our shore or elsewhere?—We have no reason to suppose they breed on our shore.

343. They are never taken with their roes?—No, not often.

344. The fishery goes on as long as the pilchards are on the coast?—Yes.

345. You never take them in the breeding season, with roe?—No; I think sometimes they have a young roe, but it is very rare.

346. When that bounty existed had you not a greater number of boats employed in the fishery than now?—Yes.

347. And there was a great deal less fish caught?—Much more, frequently; and much less at other times.

348. Is there not some test by which your fishermen know a pilchard from a herring by holding it by the dorsal fin?—In the one the head preponderates, and in the other it is an equilibrium.

349. If you hold fish up by the dorsal fin, if it is a pilchard does the head fall?—I forget which.

350. But in one the head falls, in the other it hangs in equilibrium?—It is a differently formed head.

351. It is easily distinguished?—Yes.

352. What

352. What distance do you fish from the coast?—Why our sailors would fish at a distance of about half a mile.

353. What size are the boats generally which are employed in this pilchard fishery?—They are in general about 30 feet long.

354. You are not quite understood as to the loss in the West India market?—The Mediterranean market being opened.

355. That market took all the fish you were able to supply?—Yes.

356. What proportion does your cured fish bear to the pickled?—The pickled fish is confined almost exclusively to our own neighbourhood; to the home coast.

357. Do you send any of the cured fish to the London market?—We sent some last year, by way of trial.

358. Do you think it probable you would continue?—No; we cannot get the people to like them.

359. In your opinion, would not a reduction of the Neapolitan duties restore the fishery to the state it was previous to the expiration of the bounties?—It would gradually help, as the amount of duty paid at Naples last year was about 10,000 *l.*

360. Has there been any alteration in the import duty in any part of the Mediterranean, or in the Catholic countries where your fish is sold, or about the period when the bounty was withdrawn?—There has been some alteration, but I am not sure what, nor when they were made; there were several.

361. Reductions or increases?—Both; they put on five per cent. and 10 per cent., and then they reduced it again. I inquired of a Neapolitan merchant the other day, but he could not tell me.

362. You said the price at Naples was about 3 *l.* 5 *s.*, do you mean 18 *s.* 2 *d.* duty was to be deducted?—Some of the fish at Naples sold for 75 *s.*

363. You mentioned 65 *s.* as a fair average?—Yes.

364. Was that from the scarcity or from the quality of the fish?—It was owing to there being a smaller portion of fish destined for the Neapolitan market than usual; but in consequence of the second catch occurring, a more than usually large portion was sent out, and the price fell from 24 ducats to 20.

365. But you have other fish that compete with you in the Italian market, besides the Spanish pilchards?—Yes, herrings, cod-fish and stock-fish, which do us more or less injury.

366. You have the Turkey and the Sardinia fish who come and compete with the pilchards?—Yes.

367. Now you have got another competition, which is the eel, which comes from the lakes, to a large extent, at Venice?—I believe that is so.

368. Are you aware whether the same duty is levied on the Spanish pilchards as on the British?—I think it is the same.

369. Do you know what difference there is in the price you obtain for fish in the West Indies now, and what you obtained in the war?—I think we have not sent any to the West Indies for 10 years.

370. Because it is to your interest not to send it there?—It was likely we should send some last winter, the fish being rather large for the Neapolitan market, and we rather anticipated preparing some of them for the West India market; for that market we prepare them in a different manner, we pickle them instead of pressing and packing them in a dry state.

371. You had some idea of what sort of price you would get there; did you expect to get that price you would get during the war?—I think we could get rather more, for during the war we sold at a very low price, and the bounty enabled the fishermen to exist; we sold at 12 *s.* a hogshead during the war for want of a market.

372. That made you 20 *s.* a hogshead?—It did.

373. A great number of boats were fitted out merely for the bounty, that took the chance?—I have no doubt it would operate to induce an establishment of fisheries, which otherwise would not exist.

374. What becomes of the fishermen during the remaining nine months of the year?—A large portion of them are employed afloat in various ways, in attending to the business of the seines, and a small portion of them turn their attention to agriculture.

375. They have employment during the rest of the year; you do not mean to say these men depend on the pilchards during these three months for their whole subsistence?—No, they do not.

376. Do they burden the parish rates much?—They do in places which are not successful;

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successful; at Mevagissey last year they had a small catch, and the year before also, in consequence of which the rates have been much burdened.

377. Do many of them go to sea in square-rigged vessels?—They do at other times of the year.

378. It is a nursery for seamen?—It is an excellent one.

379. Do not the great proportion employ themselves in fishing with hooks?—We lend them boats to go fishing; it is a great advantage.

380. Do not many hire themselves to merchant vessels?—Yes, for six or seven months.

381. So as to get back for the season?—Yes, they do that.

382. Have you a considerable influx of men in the season?—Yes.

383. What proportion do they bear to the whole?—Not a large proportion.

384. One-fourth?—I should doubt having so many as one-fourth quite.

385. Do you say that a share of a man belonging to one of those boats amounted to 20 *l.*?—Yes.

386. Then if that man is a prudent and careful man, that 20 *l.* will carry him through the remainder of the year?—Yes, it would.

387. With what is called chance-work?—Yes, but they are not so prudent.

388. Do they not also employ themselves a good deal as carpenters in making boats?—Yes, as carpenters, netmakers and ropemakers.

389. Connected with the fishery?—Yes.

390. Can you state what space a seine will inclose; you have stated its length, will it inclose an acre?—Not an acre, I think; I should think a quarter of a mile would scarcely inclose an acre.

391. What is the greatest quantity you have known taken up in one net?—About 2,000 hogsheads, more than that have been inclosed.

392. Within your knowledge?—About five millions of fish.

393. How many fish do you suppose a hogshead contains?—About 2,500 probably.

394. Have the goodness to state to the Committee the difference between the seine and the drift fishing?—The seine is where a shoal is seen approaching; the seine throws out as it is to encircle them, it touches the ground by leads at the bottom, and floats on the surface, and the fish become encircled; and the drift fishery is carried on by the boats which fish in deeper water, many miles from land, and throw out nets, which in many instances are a mile long, to float on the surface or at the bottom, as they think it most likely to answer; they lay in the way of the fish; they strike against them and are meshed.

395. But the greater quantity of the fish so taken are sold fresh to the country, and by individuals pickled and cured for the season, and by men who are employed in it, who are entitled to accumulate a profit?—Yes, a large quantity are employed in that way, but last year there might have been exported as many as 20,000 hogsheads of drift fish.

396. But the greater part of the drift fish is sold fresh?—I think the greater part, for they are larger than the seine fish; those nets are made of such a mesh as to catch only the largest of the fish.

397. Are they not damaged for exportation by being so entangled?—Yes.

398. And do not fetch so good a price in the foreign market?—They do not.

399. The extent of the fishery in Mount's Bay, of the drift fishery, is considered to be, supposing all the nets were out, how many miles out?—One hundred miles; they have 160 nets in the Mount's Bay.

400. And two boats to every net?—One boat only.

401. Do our fishermen come in contact with the French fishermen in the Channel?—No, never.

402. Do they at all interfere with you in the fishery?—Not at all.

403. They never purchase fish?—I do not know what they do with the drift boats; they do not with the seine.

404. What distance does the seine fishery extend?—Half a mile.

405. Do they draw the nets to shore?—No, they have small anchors to which they fasten the net, and keep the fish there a fortnight or more before they take them out; we have been obliged to send to France for salt; we dip them out with a smaller net to take them out of the water.

406. You must have boats?—We have three boats, and spare ones which we hire.

407. You take the fish out in nets in the boats?—Yes.

408. How long after taking them out of the water do you cure them?—We

cure

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cure them as quickly as possible, generally within 12 hours from the time of being taken out of the water.

409. How do you take them out of the nets?—With baskets: two men have a large basket; one stands at each end, and they bale them up out of the net into the boat; they are brought to the surface of the water by a small net which encircles the whole portion.

410. You must have a great many more men employed than 16 men and two boys?—No, we have not, except those men who take the spare boats.

411. If the French were to acquire a taste for pilchards, there is nothing to prevent their setting drift-nets, though they could not the others?—I apprehend there would be no law to prevent them: I had occasion to make that inquiry from our Custom-house, and from the lessee of the Duke of Leeds, who claims the oystery. I was informed by both parties there was no law forbidding the French to come on our coast to fish. I wrote to Prince Polignac, the French minister in London, asking him on the subject, to know if he knew of any commercial treaty; he said he knew of none, but as the English fishermen are not allowed to fish on the French coast, he presumed they would not fish on ours.

412. That does not attach to the Dutch fishermen?—No.

413. For they catch all their herrings on our coast?—Yes.

414. Do you mean that Prince Polignac admitted in his answer that the French were not allowed to fish on our shores?—That was his conviction.

415. Did you understand if he meant within a league of the land?—No, his remark was applied even to our harbours; my question applied particularly to the oysters.

416. Do you know anything of your own knowledge as to our fishermen in your part of the world going to the French coast?—Our fishermen do not go there.

417. Nor the French come to you?—No, they do not; the French mackerel boats fish somewhere about mid-channel.

418. Have you any trouble in getting licences for your boats?—No.

419. Have you known them refused by any person on your coast?—I think not; we have no grievance to complain of in that respect; we would rather dispense with the form.

420. There is no fishery in the deep sea in the Channel, or on the foreign coast or Cornwall, except from Mount's Bay?—A few others in Cawsand, but principally the Mount's Bay.

421. They principally fish in the mid-channel, do they not?—Yes.

422. Can you tell the Committee what fish they go there for?—The driving boats fish for mackerel and herrings, and with a hook and line they fish for congers, cod and whitings.

423. The congers are very large there?—Yes.

424. What is their weight?—A person told me at Polperro, he had caught one of more than 80 pounds weight; he pulled it up with a line of 100 fathoms long.

425. Can you not follow your fish?—No, we cannot; we do follow them as well as we can: last year I heard of their being at the Lizard; I rowed along the coast and sent an express eastward, where I was pretty sure the fish would call in, and by means of it they succeeded in catching some.

426. Are your boats deterred from going any distance after the fish along shore?—No.

427. What licence have you for your fishing-boats?—I really do not know; I cannot remember.

428. You are limited to some?—Perhaps so; but it is practically so little inconvenient to us, that I have really never read the licence to see.

429. Have you never known licences refused?—I think, never.

430. If a man was convicted of smuggling, would they give him a boat?—Yes, I think they would.

431. What are the limits usually granted in the Custom-house licences?—I really cannot say.

432. Do you think they consider themselves limited very strictly to that?—It does not operate in that way; we can send our boats anywhere.

433. They are licensed?—Yes, they are licensed.

434. Do you take herrings?—Yes.

435. The same nets will take herrings that take pilchards?—Yes; we catch them only in drift-nets.

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436. Do the boats belong to merchants or to the fishermen?—The fishermen; the merchants being themselves fishermen.

437. Who apply for licences, the merchantmen or the fishermen?—The fishermen.

438. The owner of the boat?—Yes, the owner of the boat.

439. Supposing you were the owner of the seine boats, do you apply for a licence in your own name, or the person under you?—I desire our agent to apply for a licence.

440. Do you happen to know in what name it is granted?—It is granted in the name of a part-owner generally.

441. How is the fishery carried on?—The seines belong to a number of individuals, sometimes to one, sometimes to 20 persons, of which I may be one; I may have one-sixth, or one-eighth, or one-fourth; therefore we are fishermen as such.

442. Then what is the value of a seine, consisting of the nets and three boats?—The cost is about 800 *l.*, including the boats.

443. That generally belongs to several persons, as joint-owners in shares?—Yes.

444. Are you liable to injury from the dog-fish?—We do not suffer much from the dog-fish, the porpoises do us more harm than the dog-fish.

445. When you used to supply the West India market, in what state was the fish?—Always pickled, it was never sent dry, it would not keep.

446. Of course you have made the attempt?—I cannot say that we have; cod-fish is sent dry, they have a shorter passage. I cannot say that it has been tried, that is our presumption.

447. Besides the fish which you have mentioned, is there not a fish perhaps peculiar to your county, and found very much at Mount's Bay, called the hake?—It is found in very large quantities with us, whether it is peculiar I am not aware.

448. Can you state any specific number you remember to have been caught in one day at Mount's Bay?—I saw 30,000.

449. What is about the size of the hake, or what weight?—It varies from three to six pounds.

450. Is that a fish that is salted?—It is sometimes.

451. How is it cooked, is it a good fish?—It is very much liked, it is a very nice fish; but owing to its being so abundant, it does not rank so high as some others.

452. What have they sold for when you have had that abundance?—Very often at a penny a head.

453. They are a very nice fish?—Yes, very nice.

454. The way they use them is to cut them in slices and broil or fry them?—Yes, it is.

455. Do you export them ever; have you known them exported?—There may have been some very small quantity exported.

456. Are they salted for home use?—Yes, they are.

457. Among the poor?—Yes.

458. Are they found a nutritious food for them?—Very much so.

459. Are they in any considerable quantities, are they to be caught all the season?—No, not all the season, at times.

460. Is it a distinct fishery, or is it a use made of the fishery in any other way?—No, it is as all other fisheries; there are cod, congers, and so on.

461. What home market have you for your Cornish fish?—Cornwall and Devon.

462. Is it sent to London?—No.

463. Do you send it to Bristol?—No, it is sent to Bristol from Plymouth.

464. Where do you send it?—It is used on the coast among the mines. I was alluding to the hake, necessarily.

465. And mullet, whitings and soles?—Yes.

466. Are you not aware, speaking of the hake fishery, that a great quantity is cured and sent abroad?—No; I think there is not much sent abroad.

467. What do you call the ling?—That is a different fish; they are found in great perfection off Scilly.

468. Are they exported?—Yes.

469. Are they caught in great quantities, and cured?—Yes, they used to be exported more than they are now; Scilly ling we estimate much.

470. Do you recollect a conger fishery, for exportation?—There was, but it was entirely abandoned.

471. Do you know why it was abandoned?—I can scarcely say; for want of a sale, I believe.

472. Do you know of any impediments to the success of your trade, or are there any

any improvements you could suggest that would remove them?—I think there is no impediment that can be reached by the legislature, except the duty at Naples, that is the principal grievance; at Genoa and Leghorn no duty is payable, unless there is a consumption duty, of which we know nothing at all; we deliver it to parties, and we know nothing of what occurs afterwards, we cannot follow the fish.

473. But it operates against the original sale?—May be it does.

474. Do the tithes press upon you?—They are complained of; I have often heard them complained of.

475. Can you suggest anything that will improve your condition as a fishery?—No, I think not.

476. Do you find that they are always plentiful in a hot summer?—I think there is nothing to be said with certainty on that point at all; it is so extremely uncertain.

477. You do not find that the case?—No.

478. Have merchants concerned in the pilchard fishery ever made application to the Government at home to use their exertions towards the reduction of the duty on pilchards?—Yes, application was made last year.

479. Not before?—Perhaps before; perhaps it may have been; but I think not before two or three years ago.

480. What was the result of your application last year?—The Board of Trade entertained the question favourably, and gave some instructions to the Minister at Naples to interfere in the matter; but we have heard nothing of it lately.

481. No practical result yet has been obtained?—No.

482. Is it considered as a countervailing duty, for duties imposed on the produce of their country in this kingdom?—Yes, I apprehend it is.

483. Do not you consider the consumer pays that duty, rather than the seller?—It falls partly on the consumer and partly on the seller; I think the best mode would be to divide it between the two.

484. If the duty was taken off you would not be able to send more?—There would be a greater demand, and a better price.

485. What do you consider the state of the fishermen or people connected, principally employed in that trade, are they in a state of poverty?—I think I must say that they are, generally speaking.

486. Greater than they were formerly?—Yes, greater than they were in 1814, 1815, 1816 and 1817.

487. How do you account for that?—The falling off.

488. The last three years the catch of fish has been very good?—Yes, but it is partial; there were about 10,000 hogsheads caught at St. Ives out of 32,000; at Mevagissey, a large fishing establishment, there was scarcely any, a very small quantity; there was more formerly; in 1816 we had 10,000 hogsheads at that place alone.

489. Does not that depend where the fish strike in?—Yes.

490. But the people of other ports go to where the fish are?—No, they do not.

491. Are they prevented?—Yes; it is too far.

492. Is there any sort of fishery that goes on in the coast you are connected with, with a view of catching small fish for manure only?—No.

493. It is only that you use the bad sort of fish for manure, because they are not fit for salting?—Yes.

494. But you have no specific fishing to obtain fish for manure?—There would be an objection to catching it for that purpose.

495. Are you aware of any, and what fish spawn on your coast, or as to fish that breed on your coast?—I should think there were 100 different kinds.

496. Are you aware whether the breeding of the fish on your coast is injudiciously interfered with by trawl-boats carrying nets?—I think there is probably injury done by trawl-boats, and the fishermen complain of the fish not being so abundant as it used to be; I do not know to what to ascribe it, except to these trawl-boats; they scrape the ground, bringing up small fish, and a great deal of what appears to be spawn; at least I believe so.

497. Is it your opinion that during a certain period of the year, namely, in the spawning season, that it would benefit the fishery if these boats were prevented dredging or trawling?—I am scarcely competent to answer that.

498. It is not within your practical knowledge?—No.

499. Would it apply to poor fishermen to deprive them of their subsistence if it were prevented?—It would deprive them.

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500. They are the poorer orders of fishermen?—Yes.

501. During that period?—Yes.

502. But supposing that restricted to a given distance from shore, would they not employ themselves without that distance?—They would.

503. They have the means of going without that distance?—Yes, they could go any where; they could go to France.

504. You think the mischief is done by the trawling boats?—Yes, they do, some.

505. Do trawling boats come into your ports at all?—Never, in our ports.

506. Are you aware whether the trawling boats do cast a vast quantity of small fish, which is of no use for the market, or to be used for manure or otherwise, overboard?—It is thrown overboard.

507. But it is dead and cold?—Yes; a great quantity of small fish caught by trawl-boats is destroyed.

508. Is it your opinion trawl-boats trawl where the spawn is deposited?—I cannot speak to that.

509. Is there any law to prevent trawling boats coming within a distance of the land?—I think they are forbidden to trawl at particular times of the year. I beg to mention that I applied to a trawl-boat to hire it, to send a letter to Portugal, I found she could not go, she had not a foreign licence.

510. Did you apply for a licence?—No, I did not; they had not the power of granting one, not at the Custom-house.

511. You wanted to send an open boat?—No, not an open boat, it was a decked vessel.

512. Besides the different fisheries you mentioned, are there not considerable oyster fisheries at your place, at Falmouth, and the intermediate neighbourhood?—Yes.

513. At Elford?—Yes.

514. They belong to Sir Richard Vyvyan, the Member?—One does.

515. Is there not a great peculiarity about your oysters?—There is about these oysters.

516. They are particularly small, and green in colour?—Yes, many of them.

517. They are considered preferable oysters by some, and are not approved by others?—They are esteemed in Flanders, they are not liked by us; there is a prejudice against them; it is supposed they contain copper, but that is not the case.

518. There is a prejudice against your green oysters, but have you not had them analysed?—We sent a barrel to Sir Everard Home; he could not find a trace of copper in them.

519. You mention that in some parts of your neighbourhood tithes are collected, in another no tithes are collected; are the tithes not collected in consequence of resistance on the part of the fishermen?—They are not collected in one place that I know of, in consequence of a resistance on the part of fishermen; but generally speaking, when they are not paid it is because they are not payable; the custom has never existed. I apprehend the claim is made in virtue of custom, and not of law.

520. Do you mean legal resistance?—There is no illegal resistance.

521. Has that subject, as far as ever you know, been a subject of investigation at the assizes?—Yes, it has, repeatedly.

522. Do you know what the result has been, has tithe been established?—In some places it has, and in others it has not, according to custom; custom has been the guide.

523. Are there oyster-beds within the harbour of Falmouth?—One is; and one is within the harbour of Elfrid, it is an estuary, a private property.

524. Not deep water, not in the sea?—It is dry at low water.

525. Are you able to inform the Committee, if on your coast any complaint exists as to the want of protection for nets, or lobsters caught in nets out of the sea?—Yes, we have, sometimes. We have not much complaint to make. I had a good many interviews with the present Lord Vernon, a good many years ago, to get the law altered in that respect; a Bill was brought in and passed through the Commons, but did not go through the Lords, to amend the laws in that respect; to obtain protection for property exposed to danger, as seines and crab-pots, and things of that kind.

526. What sort of danger?—Plunder, and malicious damage.

527. In your opinion, would it be of advantage to your coast if any jurisdiction were

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were established, such as magisterial jurisdiction, for the protection of fishing property, and prevention of malicious damage?—I doubt whether such an arrangement could be made to work with much practical benefit; we have not much to complain of on the score of damage or plunder.

528. Have you any fishing society on that coast?—No, we have not an institution of that sort.

529. What is the size of your boats as to tonnage?—About 10 tons, I think.

530. How many sails?—Some have no sails, and some have one or two large sails, lug-sails; some have none.

531. There are few instances of their smuggling a little, and going across to the other coast?—I am glad to say they do not; I do not know of a single instance; there is a very good look-out now, I hope; it does not exist except very rarely.

532. Is it your belief it does not exist on your coast materially?—I think it does not exist to a material extent, except now and then.

533. Do you suppose when it does exist, it exists by boats going to the French coast, or taking it out of the ships in the Channel?—Going to the coast; I have heard sufficient to be satisfied that they do go.

534. Have you ever known instances of boats employed in the pilchard fishery being detected in smuggling?—I cannot say I know an instance.

535. The French boats traverse the Channel, not being liable to restraint as to distance, and our fishermen being under restraint in many parts of the coast, which limit them to two, four, or six leagues, are you of opinion that they are thereby placed under hardship, in comparison with the French?—I think they are.

536. In your opinion would it be sufficient, considering the present state and strict discipline of the coast-blockade, if they were at liberty to go any distance, giving security by bond, with sureties to the Custom-house?—I think there would be no danger.

537. You think that might safely be done?—Yes.

538. And those restrictions removed?—Yes; but I think it doubtful whether that would do the fishermen benefit, for it would be more difficult for him to obtain sureties.

539. But you see it could be put to their option to do it, one way or another?—I know there are many poor honest men who could not easily obtain security.

540. Would it not, in your opinion, be a sufficient protection to the Customs, if the boat itself were made liable to forfeiture?—I doubt it.

541. Or to subject the parties to imprisonment, or to a penalty and imprisonment until the penalty is paid, without giving sureties?—I should be very glad to see it done.

542. Does it not ensue, as a necessary consequence, that French smuggling may be carried on in French boats, which have an opportunity of going over the whole Channel; and, as it is natural to suppose, it will be, if it cannot be done in English boats?—They probably would be employed; but a French boat is liable to seizure if found within a certain distance from shore, having contraband goods on board; the French have a heavy bounty, which induces them to come over towards the coast of England to purchase fish of our fishermen, and return to pay the bounty.

543. You are aware that there is a strict regulation against French boats buying fish?—Yes, we are desired by the French consul to prohibit it on our coast; we cannot detect it; it is done at sea.

544. During the time the bounty was existing in this country was there anything like bringing fish over here to obtain the bounty?—No, never, I believe; in fact, it was only given on pilchards; and them we caught only by our fishermen.

Mr. *Charles Golder*, called in; and Examined.

Mr. *Charles Golder.*

545. WHERE do you live?—At Folkestone.

546. What are you there?—Harbour-master.

547. What is the principal support of your town of Folkestone?—Fishing and coasting.

548. How many sail of fishing vessels; how many boats have you?—About 20 sail.

549. How many men and boys are employed in your fishery?—Nearly 200.

550. Reckoning two boys as a man?—No, only one boy they take to sea.

551. Two hundred men and boys?—These are all.

552. Boys

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552. Boys and men?—Yes; when I speak to that question I mean the vessels that are at sea in the mackerel season; they take nearly that number; we have 33 sail, and employ 60 or 70 men independent of those in the mackerel season.

553. There are 20 sail that go to sea?—Yes.

554. And 33 trawling-boats?—Yes; and I should say from five to eight tons.

555. Besides these men and boys, does your trade employ others on shore?—The fishing trade employs a few as to mending nets, &c.: I am originally a shipwright and boat-builder by trade myself.

556. Other persons, to a considerable number, living in the town, live by the fishing?—Yes.

557. Do you generally build your own boats?—We generally build our own boats; most part of the net comes from Bradford, ready made.

558. What is your principal fishing?—The herring season, the mackerel season, trawling season, and the sprat season and the stow-boat season.

559. Give the Committee the different seasons; what is the season for the mackerel fishery?—From the early part of May to the latter part of June.

560. What is the period of the herring fishery?—From the early part of October to the latter part of November.

561. The sprat season?—The latter part of November to the latter part of February.

562. What is the season for the other that you mentioned; the trawling?—The whiting season is one of the seasons; that commences in the month of October and lasts on till April.

563. That is also called the trawling season?—That is the whiting season, the long-line fishery.

564. When you say trawling, what do you mean?—Turbot, brill, sole and flat-fish.

565. During the months of April up to October?—No, our trawling boats at Folkestone only go that season, from the month of April up to September, then all of these boats are laid up during the period of the herring season, to the amount of 10 or 15 probably.

566. What is what you call the spawning or breeding season on your coast?—I do not know what to say, there are various opinions upon it.

567. With what sized nets do they trawl?—Ours are very small nets.

568. What sized mesh?—They ought to be to admit half-a-crown, that is about an inch and a quarter.

569. Are they, in point of fact, smaller?—No, I should say our trawling-nets are not smaller.

570. Have they canvass at the bottom, or anything of that sort?—No, certainly not.

571. Is there any complaint on your coast of fish being more scarce than formerly?—Yes.

572. Is there not a deficiency?—Yes, it is very great; in fact it is almost finished with us in the fishing seasons. I mean to say the fishing interest at Folkestone, for the last six or seven years, has been falling nearly 10, 15, 25 to 30 per cent.

573. Can you state to what causes you attribute that?—Why, I have an opinion on it, certainly.

574. Will you favour the Committee with your opinion?—That I will do; the first opinion of mine is respecting the encroachment made by the French fishery on our coast.

575. Will you explain to the Committee what that is?—They frequently come within a league of our shore in the herring season and the mackerel season, and continually in the trawling season.

576. Within a league?—Within from one to three leagues, that will be giving it a limitation; when they come in the herring and mackerel season, probably there are three vessels to our one, and on an average their vessels are from 30, 35 to 50 tons; ours are only 20 to 25 and 30 tons; and the French boats probably take 15, 16 or 18 men on board; our boats never exceed eight or nine; eight men and one boy, that is the crew of the mackerel lugger. Frequently when our people are under drift, the French come on the starboard and larboard bow, and examine the nets to see if we are at all fortunate in our pursuit.

577. How do they come?—They come and haul them up the vessels in the herring season draft. If he shoots his net at Hythe, in the flood-tide, he will frequently

quently drive to the Downs, and the Frenchmen frequently come athwart them and haul up their nets. Mr. *Charles Golder*, 14 June 1833.

578. Do your fishermen remonstrate against that?—Yes.

579. Do they persist in it?—Yes.

580. They do it in spite of them?—They do; that I have been an eye-witness to.

581. This interference is found of considerable disadvantage to our fishermen?—Very great.

582. Do they let the fish out, or plunder it?—I think they have plundered them at different times; but I do not think to any extent.

583. Did they ever take their nets?—Yes, many times they have cut them adrift; they have cut our vessels' nets adrift by cutting the rope that separates the net immediately; our vessels in the herring season should have about 600 or 700 fathoms of rope, and in the mackerel season about 1,400 fathoms of rope, if that rope is divided, there goes the gear, the net, each way.

584. Has this interference increased within the last few years, and how lately?—It increased very materially from 1825 to 1829.

585. Has it increased or decreased?—I have not heard such complaints since 1829; there have been repeated complaints, but not to that extent; we ceased our committee, we did not get redress.

586. What other causes do you consider the injury to your fishery arises from?—I contend the French boats in the herring season come on our shores with vessels of from 40 to 60 tons, as I before mentioned, and they have their cooper on board, therefore, as they catch their fish they gut them and salt them for their own market; we contend, in consequence of their doing so, it brings what we call the offal on the ground, that is the dog-fish, and the dog-fish is not only destructive to the herring, but very destructive to the net; but mind, this is only supposition.

587. You think the offal injures not only the net, and bringing dog-fish, but injures the breed?—I cannot be confident on it; I can only say since my recollection; I have been connected with fishing vessels 14 years; I have been a shipwright and boat-builder at Folkestone 21 years. In the early part of my time we never used to calculate on bringing in our shares less than 25, 30 or 40 last of herring in a season, now it is diminished to seven or eight last, and from that to 10.

588. It used to be 25, 30 or 40?—Yes.

589. Your boats are reduced in number?—Yes.

590. In consequence of the decrease of the fishery, and the number of men employed in it, your boats have decreased?—Decidedly.

591. Has the town also sustained considerable injury?—Very great.

592. What besides this, as far as your opinion goes, has injured your fishery?—Respecting the herrings and the mackerel.

593. In what have they been injured besides this?—By the French supplying the British market with fish.

594. In what way do you apprehend the French fishermen supply the British market?—Which season will you have first? we will say the herring season; the French vessels come in numbers upon the North Foreland, from the Downs to Hythe Bay, that is taking the season in a general point of view. At the early part of the season it is very probable the fish are scarce, and the run of vessels do not probably get above from 1,000 to 2,000 fish in a boat; our British carriers, as we term them, go and purchase fish of the French vessels at an early period of the year, when they are high in price, 5 *s.* a hundred, and these fish are brought to Billingsgate market, and other markets on the coast. It does not answer the purpose of the Frenchmen to go home with so small a quantity, nor to salt such a small quantity, consequently they are sold to the British buyer.

595. To what port do these buyers come?—To Billingsgate, some to Folkestone and other parts of the coast.

596. They take them to those markets?—Yes.

597. To what port do you suppose these vessels to belong?—Gravesend, Ramsgate, Margate, Dover and Folkestone. They come principally to this market.

598. But where do they come from?—From the North Foreland, and off Margate and the Downs.

599. Are they London vessels or Folkestone?—Some London, some Folkestone, some Margate, Gravesend and Dover, I should say they are generally employed in the season.

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600. Are these a species of fishing vessels?—No, they are vessels fitted out for the express purpose of going to purchase herrings in the herring season, to bring them to any market they can make a profit by, and they buy them at sea.

601. Do they buy as well of English fishermen as of French?—They buy three-fourths of the British; they buy when they can: the French will not sell to our people in the latter part of the season, they can make a better market at home; out in an early part of the year they sell, it answers their purpose to do so; they get 25 *l.* a last for fish, which would not realize the money in their market, as the prices do not vary as they do in England.

602. Is that paid for in money?—Yes.

603. Do you export fish at Folkestone?—No.

604. Which is your principal market?—We dry all the herrings imported at Folkstone.

605. How soon are they dried after they are caught?—We salt them after they have hung up 24 hours, and sometimes a month; we call them bloated herrings.

606. Do you do anything at sea?—No, we do not; we only salt them occasionally, if any of our drift-boats catch two or three last of fish, and cannot get in that day, they salt that fish at sea; if they are successful the next night, they bring a portion of fresh fish and a portion of salted fish.

607. Does it not make a material difference in the quality and value of herrings when they are cured and packed, whether they were salted immediately after they were caught, or at a distance?—No, not for our home consumption; we do not consider it so.

608. It would for exportation?—It would be more for exportation than for home consumption.

609. What is your principal home market for fish?—The country markets round; Maidstone, Chatham, Rochester, Feversham, and the country all round 50 miles.

610. Do you send much to the London market?—Not much; some to Canterbury; we carry a great quantity to the London market to sell in the present state in which they are caught, and that is white fish; but the others are brought to Folkestone and cured; we send to Canterbury and Maidstone, sending a few to our friends at Hastings.

611. As to licences; are your boats licensed for fishing?—Yes, all of them.

612. What is the usual licence granted to them?—Licences have been granted for boats under 15 tons, only four leagues.

613. But, supposing a man who has a boat under 15 tons wishes to have a longer licence, a foreign licence, is it a matter of course to get one?—He cannot get one.

614. Suppose him to be a man of extremely good character, and who can have the best of characters, and he wants to have a licence to go with his boat, under 15 tons, within a league of the French coast, can he have it as a matter of course?—That has been obtained within these last three months; he could not before.

615. Since the application from Folkestone?—I made an application myself, about six weeks ago, for a licence of that description.

616. Your's is a larger vessel?—No; one of those very boats you speak of, of eight tons; they have granted me a licence of that description for two years, from the North Foreland to Plymouth, and within a league of the French and Dutch coast.

617. Can a poor man of honest character have such a licence?—It is not generally understood.

618. Do you know of any fisherman of Folkestone, within the last five or six months, or any person of a good character, applying for an extension of licence who could have it?—Yes.

619. Who was the communication made by?—By myself.

620. Since that, are you prepared to say that any person of a good character has applied for a licence and it has been refused him?—No, certainly not; I am a lone man at Folkestone, we will say; I apply to the Customs for a licence for a boat under 15 tons. I am obliged to apply to the surveying officer at Folkestone; he grants me a certificate. What are his orders? "Report on this certificate, and the person who makes the application, as you may think, what he is:" he merely puts him down "suspected" on that certificate, then he cannot obtain his licence.

621. Suppose a licence under these circumstances to be refused; are you not aware, if the party chooses to press to have that word "suspected" inquired into, that it would be inquired in t, and the man would be required to show good reason for

for his suspicion?—That is a thing that has not been inquired into for, as I observed, many a poor man who has made an application of that sort, has not had altogether the opportunity of doing so at this present time.

622. Has any person within six months not had an opportunity of making that known to the Customs?—I speak of a later period; I do not believe any person applied for a licence of that description within these six months, but what has obtained it.

623. But it is still under the same regulation?—Yes, there is no order for it.

624. But under the regulation of the officer he does add the word "suspected"?—Yes, so I am informed.

625. There have been such things at Folkestone as smuggling?—No doubt of that.

626. Then do you know of late any person who has been convicted of smuggling formerly, but who has apparently given up the business and taken out a licence?—The point is whether the officer at the Custom-house does not overstretch his duty. The order is, if he has been convicted of smuggling, he is to give his opinion on that man for a licence accordingly: that he does not do. I can give you an instance. There was a vessel I fitted out, of 17 tons, three or four years ago: I applied for a licence as usual, which was foreign coasting and fishing; I expected my 50 leagues on the French and Dutch coast, when to my surprize I found it for three months. I wanted the vessel to go to sea, as I would have lost my season, or I would not have taken a licence of that description. After three months had expired, I felt indignant at being treated in that way by the officer at Folkestone as well as at Dover. I asked the surveying officer what he meant by giving me a licence of this description. I said, you must have reported unfavourably on that, either against me as owner, or the young man as master; he pretended to say he did not. I did not know where I could apply to know whether he did or did not, but at the expiration of the licence I wrote to the Customs in London, stating I had applied for a licence at such a day, when I was surprised it was only for three months; I begged them to refer to their books, and they would find me a part-owner of seven or eight vessels, and I stood at the Custom-house bound for 2,000 *l.* or 3,000 *l.*, and I wished to know why that was sent to me, considering my character called in question. When I went to Dover they thought I was premature in applying to the Custom-house, but not at all; they only had a straight forward course in their duty for every one. My next licence was a general one.

627. Did you ever ascertain what the suspicion was?—I had my suspicion; I expected the surveying officer had reported me or the master as a smuggler.

628. Who was the master?—Hunt Jefferey.

629. Had he been suspected?—I dare say he had been a smuggler; I do not know; he had never been convicted.

630. Did he remain master when you got the other licence?—He is master now.

631. Was he ever apprehended?—No.

632. You wrote directly to the Custom-house?—Yes, I wrote to the Commissioners; my notice was attended to.

633. Have you found any other difficulties as to obtaining licences?—No, I have not: I have found no difficulty; I made an application for a friend of mine for his boat, as I did at the same time for mine; I found no difficulty; Mr. Ward, the collector, said he would report favourably.

634. There is no custom-house at Folkestone?—No; only a watch-house.

635. From the collector at Dover you get the licences?—We are within the port of Dover.

636. Does the certificate go up from the officer at Dover?—It goes from Folkestone to Dover, every certificate; the certificate is sent to the surveyor at Folkestone.

637. Who gives the certificate?—The surveyor at Folkestone.

638. Do you know if the officers in the blockade service report on the character of persons suspected?—I think not; it does not come under the notice of them.

639. You said in a former part of your evidence, that the carriers, the boats that bring fish to the markets, bought fish out of the French boats as well as out of English boats; do all do that secretly, or is it openly done; is it considered a crime, so that they are obliged to do it secretly?—It is.

640. It is necessary to do it secretly?—Yes.

641. Do you know an instance of an information lodged at the Custom-house, or any prosecution by the parties who complained?—No, I do not.

642. You

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642. You consider it is doing an injury to the English fishery?—Yes.

643. But they have a little more respect at Folkestone for free trade than here?—There is no free trade at Folkestone.

644. They do feel the inconvenience of this trade, as they do all the way along the coast, the fishermen going and buying of French boats, and nobody takes it up; why do they not?—Because the law is not clear upon it.

645. You do not know of an instance?—Yes; some years back, a person was convicted at our place, but they convicted the master in the wrong name; it fell to the ground.

646. Otherwise he would have been convicted?—I should doubt it.

647. Is it considered so far illegal?—It has always been considered at our place that there is a penalty of 50 *l.*

648. You say there are boats at Folkestone; carrier boats?—Only two or three.

649. They would have rather an uncomfortable life if they took the fish from the French boats and took them to London?—Why these carriers are on the ground at an early part of the season; there is not a sufficient quantity caught by adventurers in the herring and the mackerel season to give these carriers a voyage; if I am an owner, I send a man with my vessel; I do not tell him to do so; he goes and sees another man with five or six vessels going to work; after they are gone I can go and get two or three last of fish out of the French boats, and can turn 15 *l.* or 20 *l.*; they do it; I believe all British carriers would give the preference to purchasing of their own vessels.

650. The French boats only supply the London markets with what is caught on the English coast?—That is invariably done.

651. You say, generally speaking, the carrier boats pay for fish in money to the French boats?—Yes.

652. If they do not pay in money, what do they give, English goods?—No; these masters probably know the different masters, French and English, their word will occasionally pass for fish; no bill.

653. Are you aware of a case where a sailor is entered as master of a fishing-boat, the master serving in a subordinate situation, merely to obtain the licence, if the master has been once convicted of smuggling?—No, I do not.

654. Is there anything else your people complain of?—Yes; they very much complain of not having an opportunity of having a district of limits as well as the French; they will not allow us to come eight or nine miles off their coast.

655. What means do they take to prevent you, if a boat tries to go in that distance?—Personal violence; I have the affidavits in my pocket of the whole of the masters, taken on that very point.

656. And on what plea they were taken and detained?—Yes.

657. Are the circumstances detailed in the affidavit?—They are.

658. How came they into your hands?—We formed a committee to protect the fishery, and petitioned the Government for assistance.

659. What is about the date of that affidavit?—1829.

660. Since 1829 have your fishermen continued to experience opposition from Frenchmen, whenever they wished to go within that nine miles?—There has been the opposition; but not so serious.

661. Fishing-boats licensed by the Custom-house do not go within a league?—All our mackerel and herring vessels are over 15 tons, consequently, we have 50 leagues; we can go to Flushing; over 15 tons we can go and take any merchandize.

662. But if they wish to fish within a league, are they at liberty to do that?—The Frenchmen drive you from the coast.

663. Does the opposition arise from the French fishermen, or are there any boats or persons employed by the French government to drive you away?—I think it arises from the French fishermen.

664. What was done?—The boats left the shore.

665. Do you know an instance of persons seized with nets and boats on the French coast?—No, I do not.

666. As far as you understand it, there was a dispute between the fishermen of the two countries?—That is as I understand it.

667. And in point of fact have they driven our people off from within nine miles?—Yes, repeatedly.

668. They have a stronger force?—Yes; and they come within a league of our own.

669. The

669. The French government does not interfere?—I never was aware.

670. Did you ever know of any boats being fired upon?—Not in this fishery.

671. In any fishery?—I have heard it stated as to the oyster fishery.

672. Of what nature has been the violence used?—Why they run on board of several of the vessels; you will find that in the affidavit.

673. Did you ever see them seize their nets?—No; they cut them away, and carried them into the port; there is an affidavit of Sanders.

674. Has there been a loss of life in any of these struggles?—No, there has not.

675. Is it not a fact that the French boats are much better manned than the English?—They are, double.

676. Do the British boats drive off the French from the English shore; do they ever board them?—We have not the strength.

677. But if they had double the number?—We are not sufficient in number; I think I could state, coming from my own door, I could see 100 to 150 fishing vessels from Sandgate down to the South Foreland.

678. What distance?—All of them within one league; out of that number there were not above 35 British fishing-boats, not more than 30 of our own boats.

679. Had they been driven in by stress of weather?—No, wind off shore; they cannot fish a league off our shore in bad weather.

680. Do the French vessels come at all into your harbour and sell fish?—No, that is a prohibition, without it is the turbot.

681. Have you made complaints to the Custom-house of their fishing within your shore?—I believe a complaint was made to the administration of the Duke of Wellington, of their fishing too near.

682. Did you then state it was within a league of the shore?—I do not know exactly the distance that is stated; here is the whole of the correspondence.

683. Do they fish within a league of the shore?—They do, occasionally.

684. If such a statement has not been made, would you be prepared at Folkestone to make such a statement to Government, of their fishing within a league of the shore?—Yes, we could do that; they have done it occasionally, it is not generally done: they have done it.

685. You have seen them yourself?—Yes; I have seen them take away, within one league of the shore, from my house, I should say 15 or 20 last of herrings in the open day; I have seen French boats come within one league, and I think within one mile, and have taken away 25 last of fish in less than four hours.

686. What is a last?—Ten thousand.

687. The coast blockade is very much more strict than formerly, and there is a much better established force to prevent smuggling on your coast?—The blockade is done away with.

688. Is not smuggling rendered much more difficult than it used to be?—There are no adventurers in smuggling.

689. In your opinion, supposing the boatmen were to give security to the Government, either with or without sureties, to the amount of their boat, and if the boat was liable to forfeiture and the boat-owner to a penalty, in your opinion, would the revenue sufficiently be protected from smuggling, though that boat was allowed to go within a league of the French shore?—We do not take a licence without securities.

690. Is there any use in these restrictions of some vessels to four and to six leagues?—None at all, in my opinion.

691. Supposing a man to give a security, and his boat was rendered liable to forfeiture, and himself to a penalty, though he did not get any other people to join him as sureties; would it, in your opinion, under the present state of the blockade service, be a sufficient protection to the revenue, even if he were allowed to go anywhere within a league of the shore?—I do not contend that the licensing or bond system is a prohibition to the fair trader; for if I mean to be an adventurer in that business, I am not going to ship goods in British bottoms. I go to Calais, perhaps there are 300 kegs of brandy; I say to a merchant, "You must supply me a vessel of 25 tons, and as you are a Frenchman that will protect them to bring them within a league of shore, and then I have a sufficient number of English to take them; your boat is secured by being foreigners." As soon as the boat is loaded, that boat is discharged: no man is so foolish as to give a security at the Customs; your bond is bad if you go smuggling.

692. Do you build fewer boats than you did?—We do.

693. Would it be safe towards the revenue if they were to allow boats that go only

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only four leagues from shore to go within a league of the coast, giving a bond, and giving a bond by which you should be liable to a penalty if found in smuggling?—That is acted on at present; I have a boat, (I have only taken a new licence within a month,) that is valued at about 100 *l.*, I gave security for that sum; if the master of that boat is a bad character, and unknown to me goes and picks up one cask of spirits of less content than 40 gallons, my boat is forfeited to the Customs, and so is my bond.

694. Is smuggling now done in the French bottoms, as far as you know?—I know nothing of smuggling, it had been done in that manner. If I was to become an adventurer that would be my plan.

695. That is occasioned by the French boat not being under legal restrictions as the English boat is?—That is it.

696. Supposing the same freedom was given to English vessels as now the French vessel has of traversing the Channel first of all, would that be an advantage to our fishermen; would it be considered as an advantage?—Certainly it would, for the small boats to have an extended licence generally.

697. What greater liberty of motion, in going from one place to another, would be of advantage to the fishermen?—Yes, the small boats to have it as well as the large ones; it would be an advantage to them.

698. Might that be safely done with respect to the revenue?—Yes, as far as my opinion goes.

699. You think they would be just as well protected?—Yes.

700. Within these last three or four months you have known no instances of the owner of a boat under 15 tons applying for an extension of licence, which has been refused?—Every person that has applied from Folkestone within the period you have named has obtained his application.

701. Whether suspected or no?—I do not know that.

Lunæ, 17° *die Junii*, 1833.

JOHN HALCOMB, ESQUIRE, IN THE CHAIR.

Mr. *Charles Golder*, again called in; and further Examined.

Mr. *Charles Golder.*

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702. IS there any sprat fishery upon the Kentish coast?—Yes.

703. The Committee have understood, that sometimes on the Kentish coast they fish for sprats for the purpose of manure, is that so?—It is so; in fact I have two or three vessels of my own in the sprat fishery, and a great many are sent to the London market; that sort of fishing is practised very little on our coast. Sometimes, at the latter part of the year, we get a few in Sandgate and Hythe Bay, and off Folkestone. The nets are of a very fine description, and they will not take any small sprats. The fine nets are only used to take large sprats for sale, and for bait to take the whiting with.

704. At what distance from the shore do they fish for sprats?—Sometimes not a stone's throw, and sometimes the vessels stand a mile or two miles, or perhaps three.

705. On that coast are the trawl-boats used?—Yes, we have about 33 sail of trawl-boats.

706. Do they drag along the shore?—The trawl is drawn along the shore.

707. What fish do you get in that way?—Turbot, plaice, brill, and flat-fish.

708. Within what distance of the shore does that take place?—From within a quarter of a mile to three miles. Nets that are used to go to sea for the sprats for manure are very small, not more that a quarter of an inch, and very stout.

709. Have they trawl-boats in Rye Bay?—Yes, all along the coast.

710. At what period of the year do they trawl?—Trawling continues the whole of the season in Rye Bay, but our boats only go upon the trawling from the month of April till the month of September. I suppose there are 60 or 70 employed in trawling from Dover the whole of the year.

711. Do not your boats go out to the Diamond?—Never; our boats that I speak

I speak of are only about from five to seven tons. Our herring and mackerel fishing generally fit out to go to the westward the early part or the middle of March, and they leave off the latter part of June or the beginning of July; then they are hauled up upon the beach and used no more till October.

712. How many sail have you of small boats?—About 33.

713. And how many of large boats?—About 20.

714. What is the tonnage of the trawl-boats?—From four to eight tons.

715. Then you must trawl in very shallow water?—We do; we trawl in Dungeness Bay, and about there; occasionally they trawl just to the eastward of Folkestone, but it is very seldom.

716. Are the flat-fish exclusively taken by the trawl?—They are; there is one thing I beg leave to correct in my evidence on the former day; I stated to the Committee that our boats generally shot about 1,600 or 1,800 fathoms of rope; now that only applies to three or four vessels that we have of the size of 30 tons; our general sized boats shoot about 1,400 or 1,500; but in the herring season it is not above half the quantity.

717. How many men does it require to get in the net?—Eight men and a boy, in a large vessel; and in the trawl-boats, two men; and in the whiting boats, we employ five and sometimes six.

718. What are the nets on board the trawl-boats worth?—The net and the warp altogether is worth about six or seven guineas.

719. What length are your beams?—Sixteen or eighteen feet.

720. Do you at all supply the London market from Folkestone?—We do; some to London and some to the country.

721. How do you take your fish to London?—When the vessels leave for the season, our carriers leave with them; probably if we had 10 or 15 boats, one gets 100 and another 200; and they take the whole of the fish and go up the river to the London market.

722. Do you ever communicate by land?—Sometimes we do, we are frequently obliged to do it at the latter part of the season; but it is very expensive.

723. Do you go to catch sprats for manure, or is it only the refuse fish that are sold for manure?—We often catch sprats for manure.

724. Do you know how many tons have been supplied in that way?—Many thousand tons.

725. Do they catch them in such a way that there is any probability of the spawn of other fish being mixed with them?—That is matter of opinion; that depends upon the season. I have invariably for the last few years sent vessels up to the North Foreland to purchase sprats for manure, and frequently they have come home very foul; by foul, I mean there has been young turbot and every species of fish among them.

726. What is the price generally per ton?—We sell them generally 1 *s.* per bushel, that would be about 1 *l.* a ton. In 1829 I sold them as low as 7 *d.* or 8 *d.* a bushel.

727. Are there not a great many small fish hauled up in the trawls that are unfit for use?—A great number of those fish, about two inches, they generally put away again, but anything of the length of four or five inches our people generally bring them on shore and sell them.

728. Are those fish generally destroyed?—Some are destroyed and some are not, but many of course are not, because they are put overboard again almost immediately.

729. Does any plan suggest itself to you for continuing the fishery of sprats, without injury to the fry of other fish?—I was strongly of opinion, about four years ago, that the catching of sprats was very injurious to the brood of fish generally, but the next two years after there were a very great quantity of sprats and of every other fish, and of the sprats that were caught there were scarcely any small among them at all.

730. Can you suggest any remedy for the evil?—I rather differ in opinion, as to the sprat fishery, from many people; many people are decidedly of opinion that it is very injurious.

731. Do you think that by limiting the sprat fishery to a greater distance from the shore, they would not incur the risk of destroying so many other fish?—I think not

732. Do you know what is the spawning season of the fish?—I think every fish has

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has its own time; we always find the spawn season very thick about the middle of November with herrings.

733. When do you find the mackerel?—We have hardly any proof of the mackerel.

734. Have you any of the whiting?—No.

735. Do you find the spawn of larger sea-fish upon your coast?—No; the masters of the fishing-boats would be more likely to know that.

736. Do you know any other spawning season besides November?—No, I do not; we do not find the spawn then, but we find the fish spawney; sometimes I see the spawn on board the vessels two or three inches deep, which had run from the fish after the fish were caught.

737. Are there any parts of the coast where you think the spawn is more deposited than in other parts?—I am not acquainted with any part except our own; ours is an open coast, and it would not be likely to be there.

Mr. *William Keer Brown*, called in; and Examined.

Mr. *W. K. Brown.*

738. WERE you the secretary to the committee for encouraging and protecting the Folkestone herring and mackerel fishery in 1829, at the formation of the committee?—I was.

739. What occasioned the formation of that committee?—The aggression made upon the fishery by the Frenchmen was the cause of it.

740. Were those aggressions complained of by the Folkestone fishermen?—They were.

741. In consequence of that what steps did you take?—The Duke of Wellington was memorialized upon the subject in December 1829.

742. Does the book which has been handed in contain the proceedings of that committee?—It does contain the whole of the proceedings.

743. Have the goodness to read the answer you received from the Duke of Wellington?—It is contained in a letter from his Grace to the Earl of Radnor.

[*The same was read, as follows:*]

" My Lord, " London, 19 September 1829.

" I HAVE received your lordship's letter, with the memorial and the affidavits of the fishermen of Folkestone. If the facts had not been sworn to by so many individuals I should not have believed their existence possible. But I send your lordship some short notes which I have made upon perusing the affidavits which your lordship enclosed. There is no proof of any injury done in any case excepting by the affidavit of one individual, no time stated, the place not described, no names given of other vessels in sight, or of the vessels from which the injury complained of was done, or of the names of those who did it. Yet all this would be necessary in order to prove that any injury had been done, much more to prove that it was done by particular individuals, so as to obtain compensation or punishment. I assure your lordship that I have given great attention to this subject; but that I cannot find any means of applying a remedy in the existing state of the fisheries, excepting to recommend increased industry to the fishermen, and that they should go to sea in such numbers, and act together in concert, so as to prevent all injuries on the part of their neighbours. I have the honour to be, my lord, your lordship's most obedient humble servant, *Wellington.*"

744. Did other fishermen along the line of coast join in your proceedings?—I was in communication also with Hastings, Ramsgate, and Margate, the whole line of coast.

745. Did they complain of the same sort of grievances?—Precisely the same.

746. As far as you had an opportunity, as secretary, of forming an opinion, did it appear that they interfered very materially with the fishing on our English coast?—Decidedly.

747. Within what distance?—Within my own personal observation; I have seen them fishing for mackerel within half a mile of the shore, from my own sitting-room window.

748. In any number?—In very large numbers; in fleets almost.

749. Fishing for what?—Fishing for herrings; or whatever fish were upon the shore at the time.

750. Was

750. Was that only occasionally?—Principally in the herring and mackerel fishery.

751. Were they actually fishing?—They were actually fishing.

752. With nets or hooks?—The herring and mackerel fishery is entirely carried on by nets.

753. Were they in such numbers as to render it impossible for our fishermen to prevent it?—Certainly; not only in number, but in the size of the vessels, and the manning of the vessels; a superior force in every respect, and physical strength also on board the vessels.

754. Were you able to obtain any redress upon this subject?—None.

755. What reply did you receive upon the subject?—His Grace recommended a greater degree of vigilance upon the part of the English fishermen, to repel the aggressions of the French fishermen.

756. For how many seasons did that continue?—I had not observed it till the season of 1829, and I have not had much observation since that period; but I do not think the aggressions have been quite so violent since that time; but they continue whenever an opportunity offers to them to come near the coast.

757. Do they ever dispose of the fish here after they have caught it, to your knowledge?—I cannot speak to my own knowledge; but I have every reason to believe that they do dispose of the fish for the British market.

758. In what way do they dispose of them, at sea or on shore?—At sea.

759. Is it your impression that our English boats, that come to the London market, go out to those vessels and take fish out of them?—It is my impression that they purchase the foreign fish and convey it to the English market.

760. Is that the general belief upon that part of the coast?—It is the general impression.

761. You have stated that you have witnessed fleets within half a mile of the coast; have you witnessed anything like violence upon their part?—I have never seen any act of aggression myself.

762. When did that society for the protection of the herring fishery cease to exist?—It ceased in December 1829; it was not actually dissolved, but the committee is not in activity.

763. Did it not fall into disuse after that letter from the Duke of Wellington?—It did; nothing more was done.

764. If the French fishermen were to abstain from fishing on our shore, would it increase the number of English fishing boats?—Certainly, if there was a protection given; probably that might be the case under a protection which does not exist at the present moment.

765. What do you call an act of aggression?—I call an act of aggression such as two vessels coming into contact together and fighting together.

766. Had you occular demonstration of that?—Certainly not.

767. Is the act of aggression you spoke of throwing their nets in the way of our fishermen, they being the stronger party?—Yes; but that is another sort of aggression.

768. Are you aware whether the French fishermen have any right to fish all over the Channel?—Of course the question of limit belongs to an Act of Parliament; I am aware that whether they have the right or not they exercise it.

769. Are you aware that it is generally supposed that they have a right to fish in the Channel generally?—I am aware of that.

770. You are aware that it is a common opinion that they are not allowed to come within gun-shot of the shore; now have you ever known instances of their laying out their nets within that distance of the shore, or only of their driving in within that distance after they have got their nets out?—No, I cannot speak to that.

771. Have you known any instances where English fishing boats have been prosecuted for purchasing fish from the French fishermen?—None.

772. Have any attempts been made to prevent the practice?—I believe not.

773. Was that a subject upon which your committee inquired?—No; there was another subject under consideration in the committee, and that was, whether they ought not to enforce the Act of Parliament with regard to the brood of fish, but that was not proceeded in.

774. Then at Folkestone your committee have not taken any pains to prevent the buying of French fish?—No.

775. Do they complain of that as a grievance?—No.

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776. Can you inform the Committee whether there is any reason to complain in that part of the coast of the fry being destroyed?—I think there is some reason to complain that the brood of fish is injured, and I believe it is injured by the Frenchmen more than by the British; their mode of fishing is different, they have what are called sunk nets, ours are floating nets.

777. Is it a fact that the principal masters of your vessels are at sea?—The bulk of them are, and they will be so for nearly a month.

778. Have you heard any complaint at Folkestone of a person having applied for a licence and not having received it?—I have not heard any complaint of that sort.

779. Can you suggest, from your practical knowledge, anything that might be done with a view to benefit or improve the fisheries, so far as the Legislature is concerned?—I should say to that, that the British fishery is placed under these disadvantages, that the Frenchmen, both in point of capital and enterprize, are superior, and there must be a cause for that effect. We know that in the year 1765 at Folkestone there were 2,650 tons of fishing craft regularly employed, besides 30 trawling boats, and now there are only about 500 tons.

780. Are you aware whether in the meantime other places in the neighbourhood have increased in proportion?—That I am not aware of; but that is a proper matter of inquiry; I suppose the decrease is larger in Folkestone than it has been elsewhere.

781. Were not a proportion of those fishing boats employed in other things besides fishing in those days?—I do not know; the year 1765 is very long ago.

782. Could any greater facilities be given for sending fish inland?—Decidedly; my opinion is that it would be very useful, if any demand could be created; but it must be by the creation of a demand, and an alteration of habits.

783. Can you suggest any legislative mode by which increased facility might be given to send fish inland, or extending the home market?—I am not aware of any legislative interference; any increased facility must be by means of rail-roads, and other means of that sort.

784. Do the fishermen complain of any hardship they experience in the London markets as to any monopoly there?—I have not heard any complaint of that kind; I have heard the fishermen complain of the heavy expense of conveying it. I beg to state that when I spoke of the decrease of the acts of aggression, I meant to apply it to those acts of violence which I understand have been committed in some instances; I have not heard of those acts lately, but so far as regards their coming here to fish, I have every reason to believe that that continues.

John Lewis, called in; and Examined.

John Lewis.

785. WHAT are you?—A fisherman.

786. Where do you reside?—At Dover.

787. How long have you been a fisherman?—Ever since I was 10 years old.

788. How old are you now?—Forty-two.

789. Are you now in the situation of a master of a fishing vessel?—Master, and part owner of a fishing vessel.

790. Are you well acquainted with the state of the fishing interest at Dover?—Yes.

791. About how many fishing craft have you there of the largest size?—The largest size vessels are in the trawling system; there are about 40 or 50.

792. What distance do they go?—In the winter time we go as low as Goree, about 200 miles from Dover; they go in mid-channel, about 40 to 50 miles from the opposite coast, and about nearly the same distance from the English.

793. In what portions of the year do you fish there?—About five months in the winter season; that is our principal fishing, in the winter season.

794. During what period of the year do you generally go to those grounds?—About November; and we leave there again in the middle of April; sometimes the latter part of April.

795. During that period what do you fish for?—Soles, turbots, brills, plaice and whitings.

796. Do you catch many turbots off the Dutch coast?—No, very few.

797. Are they a scarce fish?—They are a scarce fish.

798. Where are the turbot principally found?—At this time of the year off Dover,

Dover, except in the Holland ports, where the Dutch vessels come from; but there we are not allowed to go.

799. At what distance from the Dutch coast are you not allowed to go?—Eight or nine or ten miles.

800. Opposite what part of the coast is it?—Off Goree and Sceveland Bay.

801. At what distance from shore have you been prevented from fishing?—Two winters ago I was within six or seven miles of the shore, and I was ordered off by their fishermen.

802. Not by the government boats?—No; they said they would come and cut my trawls if I did not go.

803. Did they cut your trawls?—No, never; because I thought it was best to go away lest I should lose my trawl.

804. Have you reason to know that those threats have been the same to other vessels?—Yes, but more on the French coast than the Dutch; we have been more molested by the French than by the Dutch.

805. Have you been warned off more than once?—Yes, more than a dozen times by the Dutch, but I never have been there for two years; I would not go because I would not run any risk.

806. Is it a general understanding amongst you fishermen that they will not allow you to fish upon those grounds, and therefore you keep away?—Yes, that is the fact.

807. Is there any particular name for this ground?—It is Sceveland Bay.

808. What are the fish for which you would fish for there?—Brills and turbots, and soles; but very few soles in the Bay.

809. Is there any other name in particular to that part?—No; I was never at at any other particular place except Sceveland Bay.

810. Would it be an advantage to you if you were allowed to fish upon those grounds within a league of the Dutch coast?—It would be a great help to us and to our markets; but it must be mentioned whether the one league is to be taken from the headland or the Bay, because a league from the headland would keep us out from the Bay.

811. Supposing you were to draw a straight line from one headland to the other upon the opposite side of the Channel, on which side of the line would Sceveland Bay be?—On the Dutch side.

812. So that your notion is, that by drawing that line you would be kept out?—Yes.

813. Is all the ground in dispute on the Dutch side of the line, if drawn from one headland to the other?—Yes.

814. Do they fish there themselves?—Yes, at certain times of the year.

815. Are not the large turbot caught a long way outside of that?—They catch the large turbots in the river.

816. Do you buy the turbot on the spot?—No, we do not; but the Barking fishery has vessels to do so.

817. Are you able to state to the Committee any instance where you have been interrupted by the Dutch on any other ground except that which would be inside the line drawn from one headland to another?—No, not in open Channel.

818. Are the Dutch vessels more numerous than they used to be?—No, they are not; there are a great many boats there, and they only go a fishing at certain seasons of the year.

819. Do the foreign boats, the Dutch or French, or either of them, come into your harbour at Dover and sell their turbots?—Yes, that has been a frequent thing, and our boats go out and buy them; they used to come into the harbour, but now they do not exactly come into the harbour; they go off into the Bay, and the boats go there and buy them.

820. Do they bring anything besides turbots?—Mackerel and herrings.

821. Do you state, of your own knowledge, that Dover boats have brought mackerel and herrings out of the foreign boats?—Yes, out of the French boats.

822. And brought in openly before the Custom-house officers' sight?—I cannot say whether the Custom-house officers saw it.

823. Could they have helped seeing it?—They could not, if they were looking.

824. You say you have seen French boats come in with fish, and sell them to English boats that put off to get them; was that so near to the shore that it would be visible from the Custom-house at Dover?—Yes; they come within 200 or 300 yards.

825. And

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825. And you have known those French vessels come into the harbour and unload their cargoes?—Yes ; but they will not unload now, since there has been a piece of work about it amongst the people.

826. How long ago was that stopped?—It is not above a year and a half ago since they came into Dover harbour with their turbots and brills, and so on, and sold them openly upon the quay.

827. Is it now the practice?—The practice is now to come into the Bay, and the English boats go off and buy them, and bring them on shore in face of the Custom-house.

828. What fish do they bring?—Turbots, brills, herrings and mackerel.

829. Are you able to state this positively from your own knowledge?—I am.

830. In many instances within your knowledge?—It is a regular thing ; sometimes three or four times in the course of a week you will see three or four French boats. Now at this present time some boats come in with the turbots and some with the mackerel.

831. Can you state who buys them ; is it any poor fisherman or the large dealers?—It is no large dealers, it is poor people who buy fish and send them to the London market.

832. Is that at a period when our boats can supply the markets fully, or at a period of scarcity of fish?—Our boats could supply the market, provided that we could keep out the French boats from our coast the same distance that they will not allow us to go within land.

833. Could your boats supply the London market?—Yes ; our Bay is a great harbour for fish of all sorts, and particularly shoal fish, that is mackerel and herrings ; there are from 50 to 100 boats come and break the shoal ; our little boats are not allowed to shoot their nets, and the French fishermen shoot their nets close to the shore, and run them off about 1,400 to 1,500 fathoms. Our boats cannot shoot till sunset, and as soon as they offer to shoot, the French fisherman shoves his gear over them, and tells them if they do not haul in they will cut their trawls.

834. At what distance have you seen that within shore?—I have seen it within half a mile of our shore ; it was only last Tuesday week that I could not shoot my trawl at all in Hythe Bay, on account of them ; they were within half a mile of the dry shore, and they shot right across. We came out of Rye Bay to shoot in Hythe Bay, and we could not shoot because there were so many Frenchmen shot in our way, and our trawl ; we drag our trawl faster than their nets go, because they only go with the drift of the tide, and by and by that would drag into the French fisherman's nets, and he would turn off his boat and come and threaten to cut our trawl away, or very likely he would come on board and give us a good thrashing.

835. How many men have you on board?—We have only five on board, and they have from 15 or 16 to 22 or 23 ; they are compelled to carry so many, according to the tonnage of the vessels.

836. What is the tonnage of your vessel?—Nearly 34 tons.

837. What is the kind of net which the French lay down?—A herring net and a mackerel net.

838. Not a trammil?—No, a trammil is used after they have done the mackerel season.

839. Have they to your knowledge recently destroyed any of our fishermen's nets or cut their trawls?—They have been on board and threatened to do it, and they have had a battle on board.

840. Are they too numerous for you?—Yes, they are.

841. When has this happened ; lately?—It was only the week before last that they hove a grapple into Daniel Lumber's vessel, and they wanted to search his vessel to see if they could find some of their gear which they had lost. Now we never ought to go and search their vessels if we lose ours.

842. Do you often lose your gear?—Not in our trawling system, but in the mackerel boats from Hythe and Folkestone it is a very frequent thing ; they go across and break the headline.

843. Can you state any instances lately in which they have either taken away the nets or beaten the men in the English boats?—There was an Aldborough boat, three or four years ago, but I was not there to see it, nor do I know anything about it more than I have heard.

844. In what way do you suppose the Frenchmen come into our bays and injure the breed of the fish?—As soon as the mackerel season is over, they come into our bays, and they go into two or three fathoms water, where we never fish ourselves, because

because we will not spoil the brood; we do not fish within nine or ten or from that to 20 fathom, but those fishermen come in in the morning, shoot their trawls, and get from four to five bushels of little things not bigger than two inches long, and they hoist their sails and away they run off to sea, and then they shoot from 1,600 to 1,800 fathom of rope with hooks, and to each of those hooks there is one or two of those fish, and as soon as they have baited their lines they heave all the rest overboard, and they take away a great quantity in that way; they do that in Rye Bay and Hythe Bay both; they come with a chain to drag on the ground which cuts all the brood to pieces.

845. Within what distance of the dry shore is that?—Within half a mile; they go out in two or three fathom water.

846. The Committee understand that those are grounds which you never think of disturbing, but they do it to get bait for their lines?—To get bait for their long-lines.

847. In what numbers do they come there?—From 60 to 100.

848. During what season do they come in that manner?—Now; as soon as the mackerel season is over; they will keep on doing it till the herring season goes on, and they carry those little fish off for catching skates and cod-fish and so on.

849. In the mid-channel?—No, about a mile or two miles from the Ness Point. Now if we could keep them three miles from the headland in a straight line, that would preserve our fishery.

850. You say that they come in two or three fathom water; is that a safe thing for great boats?—It is quite safe; they do not draw more than eight or ten feet water, and if they go in three fathom that is 18 feet, but it is not all the great boats that come in; a great many of the small boats come in and supply the others.

851. Have you ever been prevented fishing within a certain distance from the French coast?—I have not been to try it; I heard enough of other people trying it.

852. What is the general understanding among you as to the distance you may go from the French shore?—We never go nearer than 16 or 17 miles.

853. What is the understanding among you as to the distance within which they will let you go?—Nine miles, that is three leagues; that is the general understanding among English fishermen: if they had the same limits that they give us, I should be satisfied, and so would all the fishermen.

854. Are you acquainted with the sprat fishery at all upon the Dover coast?—Upon the Dover coast they do not sprat at all; it is all in the deeps, in the burrow deeps and black deeps, and on the flats, and on the east swim.

855. Do you know anything about the sprat fishing and flat-fish?—They break a shoal of fish; since they have taken it for manure for land they do not try to get fish for the market, but they stop upon the ground nine or ten days till they get a voyage.

856. Who do that?—The whole of the stow-boat vessels.

857. From what ports do they go?—From Bricklesea and Faversham, and several other places.

858. Those boats you say stay for a week at a time, catching sprats and other fish, not to sell, but for manure?—Yes.

859. Do they catch the sprats upon those parts where the other fish breed?—Yes.

860. In your opinion does their fishing in that way upon those grounds injure the breed of fish?—Yes, I know it does, for at one time, before the peace, there were plenty of fish in the deeps, and after the peace came, when the vessels were paid off, they all took to stow-boating, and there are now from 400 to 500 of them, or more, and there would not be so many if they were not allowed to fish for manure, and the men would not stop a week at a time, but now they remain till they get a voyage.

861. What do you mean by getting a voyage?—Till they get a load; and if you go and get a handkerchief full of those sprats, you will find a quantity of turbots and soles, and brills, and all other sorts of fish, little things not bigger than your nail.

862. Do you know that yourself?—Yes; I have been myself in the stow-boat season.

863. Since what time do you imagine that the breed of fish has become so scarce?—It is about 21 or 22 years ago since you could go into the deeps and

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catch as much as seven or eight bushels of sole and a few turbots, and now you cannot go and get scarcely a turbot or a brill, or a sole, on the North Foreland.

864. Do you mean in a day?—In a tide.

865. Has the fish become much more scarce in the Channel than it was?—Very much indeed.

866. For how many years do you think that has been going on?—It has been getting worse and worse since about 18 or 20 years past, and every year it is worse and worse; for about two months to come, we shall all go to sea, and in consequence of what has been stated, we shall not get enough to pay our provisions on our own grounds, because we have got nobody to preserve our British fishery, and have not had for 20 years past.

867. In what part of the Channel is there such a scarcity of fish to your knowledge?—I can speak from the Land's End to as far as North Yarmouth.

868. How long ago did you know it to be plentiful?—Fourteen or fifteen years ago there was more than there is now; but 18 or 20 years ago we could go where we liked and find plenty.

869. Has the stow-boat been going on for the same length of time?—It has been to a greater extent since the peace, because the vessels have nothing else to do, and there are so many vessels that they cut everything to pieces.

870. Do you attribute the scarcity of fish in a great degree to the stow-boat system?—Yes.

871. How many men are there on board the stow-boats?—Some carry five and some six.

872. Have you any idea what number of cargoes they catch in a year for manure?—At the time the fish were plentiful, they used to make two or three voyages a week.

873. Is there no period of the year in which sprats could be caught for manure, which would not be open to an objection of destroying small fry of other fish?—I cannot say anything to that.

874. Has the number of English fishing boats increased since the peace?—Some have increased and some have decreased.

875. At Dover have they increased?—Dover has increased very much in the trawl fishery; but in the herring and mackerel they have gone back.

876. As you say that the fishery has got much worse than it was, may not that be on account of their being a greater number employed?—There are more boats, but there is not so good a living as there was then; because now we go away to the North Sea, and we did not want to go to the North Sea 16 or 18 years ago; but now our brood is taken away.

877. Can you state whether the price of fish in the London market has increased?—There has been a great deal of difference in the price; I mean to say that about 16 or 18 years ago our salesmen used to send us from a guinea up to 2 *l.* a pot, and now we get but a small quantity of fish compared to what we had then, and sometimes we get no more than 16*s.* or 14*s.*, or 12*s.* a pot.

878. What fish do you allude to?—Turbots, brills and soles.

879. How is it that you get so little from the salesmen?—That I cannot tell.

880. Can you tell whether the quantity of fish brought to the London market is more or less than it used to be?—There is less fish than there was, because our grounds are spoiled, and we cannot catch a fish.

881. Are you in the habit of attending the London market yourself?—No.

882. What is your mode of sending your fish to the London market; do you send it up to a salesman in London?—We send it up by vans on purpose.

883. Do you mostly send it by land?—We do.

884. To whom do you direct it?—To a salesman in Billingsgate; he writes us word what money he makes every morning.

885. Then he renders you a sale account?—Yes.

886. Does he take the whole off your hands?—It is sent to him to do the best he can for us.

887. And whatever account he sends to you, you abide by?—Yes.

888. Are there many salesmen?—A great number; and some send to one and some send to another, and every man has a salesman; some salesmen have eight or ten vessels out of Dover to sell for.

889. Do you send to any other market besides London?—No, unless we can sell them at Dover for the price we have been in the habit of getting in London, and then we sell them; but if not, we send them to London.

890. Do

890. Do you think the herrings and mackerel have been as plentiful upon the coast the last few years as they were before?—No; I have stated a reason for it.

891. Where do the mackerel breed?—It is impossible for anybody to tell that.

892. Do the mackerel and herrings breed in our Channel?—No, they do not; I do not know where they breed.

893. You have stated that there is a great scarcity of fish in the Channel, in consequence of the brood having been destroyed; does that apply to the mackerel or herrings?—No, it does not apply to the mackerel and the herrings.

894. At what distance do you go from the coast to catch the mackerel and herrings?—Sometimes just out of the harbour, and sometimes a little further off; they generally come in near to the shore.

895. You have stated that the fishermen in the last 15 or 20 years have increased in your neighbourhood; during the last five years has there been any decrease?—They are beginning to decrease very fast now.

896. How are the people in the fishing trade paid, generally speaking?—They generally go by shares; they have no pay at all.

897. How many is the usual supply of men and boys on board a fishing vessel?—Five men, and sometimes six.

898. How do you divide the shares?—The owner takes three shares for keeping the vessel up, and nets and materials; the master takes a share and a half; the next man has a share and a quarter; and if there is another man besides the apprentice he takes one share; the oldest apprentice takes one share, and the youngest apprentice three-quarters or one-half.

899. How many shares is it divided into?—Seven and a half or eight shares, or eight and a quarter.

900. Have you had any difficulty in obtaining licences for your fishing boats?—I never had any.

901. Do the fishermen in Dover complain of any difficulty?—No, our sort of boats have no reason to complain, it is only the smaller boats under 15 tons.

902. What is the general tonnage of your fishing vessels?—They run from about 33 and 34 tons, to 41 and 42 tons.

903. Do you happen to know that there has been of late years a great scarcity of fish prevailing at the Land's End, and to the north of Cornwall, as well as in your own neighbourhood?—Yes; when they come into Mount's Bay there are a great many French that catch the chief of the fish, and run away to France with them.

904. Do the French boats go upon the coast of Cornwall?—I believe they do.

905. With respect to the destruction of the fry of the small fish, do you attribute that to the smallness of the mesh of the nets, or is there any means you can point out to avoid that?—None of our people will go there to catch the small fish, but the French will come and catch it for bait.

906. If the French fishery boats were prevented from fishing for a full league beyond the point of each headland, do you think that the brood of fish would be preserved?—Yes, I think it would.

907. Would a league from the shore all the way preserve it?—No, it would not; a league from the headland in a straight line is the only thing that would do.

908. When you were warned off the Dutch coasts for being in the bays, were you ever warned off by a government vessel?—Not in Holland.

909. Have you ever seen our revenue vessels amongst the French fishing vessels when they have been in our bays?—Yes, constantly in Rye Bay and in Hythe Bay; our cutters are constantly there, and the French boats are trawling within them constantly, but our cutters never take any notice of them.

910. Is that within three miles of the shore?—Within half a mile.

911. Does a great deal of fishing of that sort go on within three miles of the shore?—Yes.

912. Supposing all the ground covered with water within three miles of the shore to belong to this country, do they fish within that limit?—Yes, constantly.

913. And within sight of our cruizers?—Constantly.

914. And our boats do not fish much within there?—Our boats never go in there at all. The fish spawn near to the shore, and as the fish grow they go off into deep water.

915. Do you catch much of the small fish where you fish?—No; and that is the reason we do not go in nearer.

916. You have stated you have found much less fish to catch, but do you suppose

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pose there is a great deal less fish comes into the Channel; for instance, mackerel and fish of that sort, which do not remain in the Channel all the year round?—I mean to say that there is fish enough to supply all the market, provided it were not for the French fishermen coming in to take it.

917. With respect to the fish that live constantly in the Channel, do you suppose that they have decreased in quantity?—Very much.

918. Do you know of any complaints being made to the Custom-house about the French coming and selling fish in Dover Bay?—Complaints have been made of their not stopping it; and the tide-surveyor said, "If you prove it, and you can swear that the money was paid for that fish, I will stop it." But nobody can swear positively what the money was paid for.

919. Are you not aware that it is contrary to law to bring the French fish on shore, and to sell it; and that consequently you could prosecute the man that buys it; do you know of any prosecution of that sort?—No.

920. You never knew any trouble taken about it?—No.

Thomas Knight, called in; and Examined.

Thomas Knight.

921. WHAT are you?—I have followed fishing 20 years, off and on.

922. Are you a master fisherman now?—No; I lost my vessel last Tuesday coming into Dover harbour with a gale.

923. Were you the owner of the vessel?—It was all my own.

924. Was she insured?—In a club, for about half her value.

925. Where have you been in the habit of fishing?—In the winter time in the North Sea, in the summer in Rye Bay mostly; I have been to Brighton these last three summers.

926. What fish do you fish for there mostly?—Turbots, soles and brills.

927. Have you been at all upon the French coast to fish?—I went there the summer before last; I went out of Rye Bay to see if I could find some fish on a bank called the Bassiere Bank, about eight or nine miles to the westward of Boulogne; I suppose it is four or five miles from the land. A vessel came running down towards us, and hoisted French colours; I said to our chaps, "Get our jack up, this is a French coast guard:" she had four guns, and 14 men belonging to her. He hailed me in English, and asked me what I was doing; I told him I was only fishing: it was quite a calm, and the tide was running to the eastward, and I let go my anchor. He let go his anchor and got his boat out, and sent five hands on board; one of them spoke very good English: he asked where I was going fishing; I told him on the Bassiere Bank: he said, "You must not fish here; my commander says, if you fish here, if you put your trawl down within nine miles of the French land, he shall take you to Boulogne and keep you there for three months, and make you pay 2*l.* a month;" I said, "what is all this for," he said, "you know we will not let you kill the brood, you come here to destroy our brood." I said, "I suppose you mean the small fish," he said, "yes;" and I said, "I have come after the big ones," he said, "that does not signify, if you put down your trawl within nine miles my commander will take you to Boulogne, and serve you as I have said." I said, tell your officer if he will have the goodness to go to Rye Bay, I will ensure him to find from 40 to 50 sail of Boulogne boats and Dieppe boats;" "Ah," said he, "I know that, but the laws in France are not the laws in England."

928. Had you been fishing there?—No, I had not begun, I had come out of Rye Bay.

929. Is not the Bassiere Bank a detached bank from the shore?—Yes.

930. And the fish was found upon the Bank?—Yes.

931. How far is it from the inner part of the Bank to the shore?—About three miles at the east end of it, but at the west end of it it goes out a good deal.

932. Was this French vessel a regular Government boat?—Yes; he said I was not to come within three leagues.

933. Has that happened to you more than once?—I have never tried it since.

934. Have you known others?—No.

935. Have other fishermen gone within three leagues?—Yes, they have gone into the southward of the Bassiere Bank.

936. Do you ever fish for oysters in that neighbourhood?—No.

937. Do you know anything about the fish being more scarce than they used to be in the Channel?—Yes; in former times I have known in Rye Bay from 100 to

to 150 vessels fishing in a tide from Fairleigh to Dungeness, and there you might tow and trawl from 10 to 12 miles, and you would get from 20 to 25 bushels of plaice, and dabs and whiting, and now you may tow there and you will not get a bushel and a half.

938. Can you state to what cause it is owing that there is such a scarcity now?—On account of the French coming and destroying our broods.

939. Along what line of cost do they do that?—In Hythe Bay and Rye Bay; there is a great deal of brood in Hythe Bay, and we suppose that it runs from one bay to another.

940. Do you know of their doing it in any other part of the coast?—No, I cannot say in any other part; they come out to fish for hakes and skate and cod-fish; when they come out of Boulogne they have got no bait, they do not stop to take their bait upon their own coast to destroy their own brood, but they come over here, and they come right past us in Rye Bay, and they catch from two bushels to two bushels and a half of little things not longer than your thumb, all brood, and then they go into deep water, let go their anchor, and all hands turn to and bait their lines.

941. What length are the lines?—From 700 to 800 fathom; half the quantity that they have got will bait all their lines, they pick out the best, and the rest is all dead, and as soon as the lines are baited they heave the rest away, and that destroys all the brood; and the next day you will see the same number of French boats come out again and take away the same quantity, and it is not one boat but 40 in the morning that will be doing that.

942. How long have you known that to be the case?—I can say for the last five years.

943. In the last five years have you found the brood of fish very much decreased?—Yes, we know it is decreased.

944. Supposing the French were hindered from coming within one league of the shore, would that protect your brood?—No.

945. Supposing you draw a line from one headland to another, and they are prevented from coming within a league of that line, would that protect the brood?—Yes, one league from our headland would save them from disturbing our brood.

946. In what way do the French hinder our mackerel boats from working?—By coming and shooting right over us; their boats are twice as heavy as ours, and if they shoot across us they will destroy all our nets. The tide will do it; their heavy ropes will tear them all to pieces; I have myself cut their mackerel nets away.

947. Why did you do that?—Because the fisherman saw us coming, and he came and shot right athwart us, and when he got to us, I said, "what am I to do;" he told me to hang the grappling overboard; I did so, and as soon as we came to his net we hove up, and we got a hatchet and cut his net, and went on.

948. What did he do upon that?—He did not come the next night.

949. How many of the Frenchmen were there?—There were six or eight of them.

950. Upon the whole which are the strongest body, the English fishermen or the French fishermen?—The French.

951. Are they double or treble?—Treble; there are between 200 and 300 sail out of Boulogne, and they have 13 men and two or three boys to each vessel.

952. Do they interfere with you in the mackerel and herring fishery within a league of the shore?—Yes, so that you might heave a basket on board of them from Dover Pier Head.

953. Do you know any steps being taken to prevent it?—No; and I do not know what could be done, unless you keep them from within a league of the headland.

954. Do you know of any fish having been bought out of the French boats?—I know that they bring fish to Dover and sell it. I see them do it every day when I am at home.

955. Have you seen them sell any other fish but turbot?—No, nothing but turbot, unless when there has been a gale of wind and they have been blown into the harbour, and they have gone to a magistrate and got a licence to sell to get provisions.

956. Have you seen them sell brill or soles, or mackerel?—No, not within eight or nine years.

957. Have you known them sell herrings?—No, only dead turbot.

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958. Or lobsters?—No, they do not get any.

959. Or eels?—No.

960. Where are the turbot principally got?—On the Ridge and on the Varne; the Varne is about seven miles from Dover, and the Ridge is about 12 miles.

961. Is it any injury to the English fishermen that the foreigners are allowed to sell turbot?—A great injury.

962. Could you supply the market sufficiently without them?—I think we ought to be able to do it.

963. Where could you catch the turbot?—We could catch it on the Ridge.

964. Do you never go off the Dutch coast for turbot?—No.

965. Did you ever go on the Dogger Bank?—No, not so far as that.

966. Can you explain why the French fishing vessels are larger than ours?—No, they are not so large as our smacks.

967. Are the Ridge and the Varne both of them beyond a league from the French coast?—Yes.

968. Have you had any difficulty in obtaining a licence for your boat?—No.

969. Have you heard of several instances where the boatmen have been refused licences?—Yes, for the small boats.

970. To what market do you send your fish?—To London.

971. Do you send to a salesman?—Yes.

972. Do you get pretty good prices for your cargoes?—Yes, pretty well, but we do not catch many; last week we got 4 *l.* for half a pad, that is a basket that was all turbot, but it is not one time in fifty that we have such a market as that; sometimes we do not get 1 *l.* for a pad, or 18 *s.*; half a pad is two pots.

973. What is the usual market-price for half a pad?—About two or three and twenty shillings.

974. Is there a great proportion of the turbot supplied by foreign fishing-boats?—I do not know; I know what they bring to Dover, and some will bring 40, some 50, some 120, and frequently we do not catch more than two or three, and they catch it on hooks with mackerel bait.

975. How comes it that they catch so many more than you do?—We do no go with lines, it would not answer in our smacks; they come in small boats with 10 or a dozen hands rowing them, they come and they shoot their lines right across the bank.

976. What is there to prevent your doing the same as they do?—In the first place we should have boats to find for it, and we should have lines to get; the turbot season is only about five weeks or a month, and it is only when the mackerel get very cheap that they can afford to get mackerel for bait; it is only a short time that the turbot will bite at the mackerel, and then after that they will not bite at all, and there is no other bait that will take but mackerel.

977. Can you speak to French boats selling other fish besides turbot to the English boats at Dover?—Nothing but turbot; if they were to go and take herrings or mackerel out of the French boats, the officer would seize the boat, the officer would soon have somebody to let him know it.

978. And in your opinion the French boats do not bring anything but turbot to the English market?—Nothing else, except when they have been driven in by a gale, and they have been allowed to sell to get provisions.

979. On the other side, when you have been driven in, have they allowed you to sell fish to get provisions?—No; I have heard those that have been there say that they told them, "you must not sell any fish, but you must go to the British consul, and he must relieve you."

980. Is it the general opinion among the English fishermen that they are not to go within nine miles of the French shore?—Yes.

981. Is there much smuggling carried on at Dover?—I do not know that there is; it is pretty well all done away I believe.

982. You have spoken of your having been obliged, in one instance, to cut the fishermen's nets, in order to get clear of them; in that instance whose nets were laid down first?—I do not know; I suppose mine might have been.

983. Were your nets upon the ground?—Yes.

984. And his were over yours?—His nets go no faster than the tide, and I go faster than the tide, with the wind; I am trawling, and when I come to him I must catch him, and then the nets will be both brought up together.

985. Do you know of any complaints having been made by the English fishermen

men of their being driven off the French coast?—No, I do not know of anybody who has been there except myself. *Thomas Knight.* 17 June 1833.

986. Do you know of any complaints having been made to the Custom-house of the French boats coming in to catch the fry for bait?—No.

987. Must they not be seen by the Custom-house vessels?—Yes, they must.

988. Do the Custom-house boats ever interfere with them about their fishing?—I never saw or heard that they interrupted them.

989. You have stated that you never heard in Dover of any fish being purchased out of the French boats for the English market; if that was done, should not you, as a fisherman, complain of it?—Yes, I should apply to the surveyor.

990. Have you ever applied to the surveyor upon that subject?—No, never.

991. When you were warned off upon the French coast, did you understand that you were warned off because you were in that Bay, or because in general their law was that you should not fish within nine miles of their coast?—Because they would not let me fish to destroy their brood; he stuck to me till 10 o'clock in the morning.

992. Have you known any other instances of interruptions by the French upon their coast?—No, nobody would go afterwards to attempt it; we might have gone 20 times and not have fallen in with that vessel.

993. Do you know the name of that French vessel that warned you?—No; she belongs to Dieppe.

994. When did this happen?—The summer before last; in the mackerel season.

995. Do you know of any mischief done by the French boats to our boats that have gone near their shore?—No, I do not believe any of our boats go very near there; the mackerel and herrings generally lie upon the English coast; the herrings lie among the sands, and round such a bay as Hythe Bay and Rye Bay.

Mercurii, 19° die Junii, 1833.

JOHN HALCOMB, ESQUIRE, IN THE CHAIR.

Thomas Hall, called in; and Examined.

996. WHERE do you live?—At Folkestone. *Thomas Hall.* 19 June 1833.

997. What are you?—A fisherman.

998. Are you a master of a fishing vessel?—Yes, the Dart lugger.

999. How many years have you been a fisherman at Folkestone?—I have never followed hardly anything else.

1000. What age are you now?—Sixty-three.

1001. In what fishing are you employed?—Mackerel and herring.

1002. Have you sustained any inconvenience from the French interfering?—A good deal, every season.

1003. For how long a time?—Since seven or eight years ago; sometimes they come in and stand in by our nets, and hook them by the grapnel, and tear them all to pieces.

1004. How often does that happen?—As often as they can do it; they never cross us without doing it.

1005. Does that happen many times in the season?—Many times in the night, sometimes.

1006. Do they appear to do it purposely or accidentally?—The nets are hauled up to see whether there are any fish in them, and if they find we have got any, they will throw their nets alongside; but if we have got none, they will go to another place.

1007. Within what distance of the shore has that been frequently done?—It has been done within a mile and a half or two miles; and within the Downs it has frequently been done.

1008. Is it done within a league of the shore?—Within half a league.

1009. Do the French very constantly fish within half a league of the shore during the season?—Yes, owing to the winds; the north winds blow off from the

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South Foreland all the way down the coast, and they get as near into our bay as they possibly can, and drive us out.

1010. What do they do to drive you out?—They come inside of us; and our craft are not so heavy as theirs.

1011. They are stronger, then, in their vessels and their men?—They are.

1012. How does their coming inside of you drive you away?—We are obliged to shift from them; we have not power enough to tackle them.

1013. Supposing French vessels came in between you and the land, how does that oblige you to get away?—To make room; we cannot all be in one place; we cannot all sit in one chair.

1014. Has their coming within you the effect of spoiling your fishing?—Certainly it has; I have known them to come so near to the shore at Dover that you could throw a stone to them.

1015. How does it hinder your going on with your fishing, when the French come inside of you?—They drive foul of us, and their craft is so heavy that we cannot get them up very often.

1016. Do the nets get entangled the one with the other?—They do.

1017. Does that destroy their fishery as well as yours?—No; their nets and every thing are stouter and stronger than ours.

1018. Do not some of the English fishermen, sometimes fishing on the same ground as you, fall foul of you?—We generally take care to give one another room; but the Frenchman takes all the advantage of coming between us.

1019. Have you ever complained of that to the Custom-house boats, or to the Government vessels?—Yes.

1020. Have you ever known them interfere to prevent it?—Very little; I cannot say that they have never done so, because last herring season they did so a little; but before that I never saw any.

1021. Who interfered last season?—The cutters, boats and officers upon the blockade system went aboard of them, and told them that they should not sell their fish in Broadstairs Roads.

1022. Did you ever know them come on shore and sell the fish?—In the Roadstead, that is a quarter of a mile from the shore.

1023. Have you ever tried yourself to get fishing upon the French coast?—I cannot say that I have, but I have known my neighbours do it, and vessels that I have had part in; and they have been denied by them.

1024. Have you ever known the French boats, upon your shore, come into the breeding grounds near Rye Bay and Hythe Bay to get bait?—I have witnessed that almost every day.

1025. In your opinion, does what they do injure the breed of your fish?—No doubt of it.

1026. In what number of vessels is it usual for them to come?—You see from 10 to 20 some days.

1027. What sized vessels?—From 20 to 30 tons.

1028. Do they come in to get bait?—They do.

1029. Does it injure the young brood of fish?—It must do so, the ground is very much disturbed by them; we have 30 or 40 boats out of Folkestone that go trawling in Hythe Bay every season.

1030. Do they go upon this ground where the brood is?—Yes, they cannot avoid that, it is impossible to tell where it is till you catch it; we cannot help destroying a little, but we always try to prevent it as much as we can.

1031. Is not your rule not to go within a certain depth of water?—That is broke through a good deal, it ought to be observed a great deal more than it is.

1032. As far as you know, is there any scarcity at present of fish in the Channel on your shore?—Yes, very much so; to my knowledge there is not a quarter part of the fish that there was in Hythe Bay 20 years ago.

1033. Is it generally scarce in the Channel now, compared with what it used to be?—I believe that no fish is so plentiful now as it used to be.

1034. To what cause do you impute that?—I think it must be from the number of vessels fishing being so much greater than it was formerly.

1035. Do you think that the brood of the fish is much destroyed?—Yes, very much.

1036. Is there any cause that you can mention that makes the fish scarce?—No; no further than tearing the grounds all to pieces.

1037. In

1037. In the last 15 years has the fishing interest at Folkestone very much got worse?—Yes.

1038. Is it in a very bad state now?—In a very bad state, indeed.

1039. Can you tell from what cause that is?—We consider that a good deal of injury is from the French fishing on our coast so much.

1040. Do the French at all interfere with your market; do they sell to the English?—They sell to the English.

1041. Do they do so to any large extent?—At the present time there have been four or five boats that have come for many years; they have got from two to three thousand within this last fortnight, and they never go from there, and the fish must come to this market.

1042. Where do they belong to?—To a place near Dieppe.

1043. How many years have you known them off the North Foreland?—Ever since the peace.

1044. Have you seen them there this season?—I have not been there myself this season.

1045. Last season did you see them?—Yes.

1046. Do you know that they were fishing off there and did not go home?—Yes; I have seen them put the fish out of their boats into the carriers that bring them here.

1047. Where do those carrier vessels come from?—From London, Gravesend and Rochester, and other places.

1048. Are they principally Thames boats?—Yes.

1049. What kind of fish have they in that way disposed of?—Mackerel now, at this season.

1050. What other sort of fish?—Herrings.

1051. Any cod-fish?—No.

1052. Any turbot?—Not much.

1053. Any whitings?—No.

1054. Any lobsters?—No.

1055. Congers?—A little, but not much.

1056. What else besides mackerel and herrings?—They are the two principal things.

1057. Are there any sprats caught in that neighbourhood?—Yes.

1058. Whereabouts?—Half a mile from the shore.

1059. Do the French vessels ever come after the sprats?—No.

1060. Do they fish for the sprats much for manure?—Not about us.

1061. Where do you principally send your fish to from Folkestone?—Mostly to London.

1062. Who was your salesman?—Mr. Tapley I have sent them to; but I have sold them at sea to come to London.

1063. Do the salesmen in London send their boats down to your fishing vessels?—Yes.

1064. What is your principal market, the London market or the country market?—The London market.

1065. Do you send it up mostly by water or inland?—By water.

1066. How often in a season do you send by land carriage, by post-horses?—That depends upon the weather; we send every day.

1067. By hiring post-horses?—Yes.

1068. Is not the sale of that description of fish at Folkestone principally in the interior, in the country around?—No; there is no consumption for it.

1069. You say that you sometimes sell your fish at sea; do you ever sell your fish to those Thames boats that are called carrier boats?—Yes.

1070. Do those carrier boats give the preference to English boats over the French boats?—I think they sometimes give us 4*s.* or 5*s.* more for the mackerel.

1071. Have you seen the London boats buy out of the French vessels, and do you know what they give in exchange for those fish?—Money.

1072. Not goods or credit?—The fishermen that I said have been there so long, would let you have the fish, and come to you to be paid at the end of the season.

1073. You have stated that the fishery is injured by the number of boats; do you mean that the number of English boats has increased as well as the number of the French?—No, there are not a quarter part so many as there were 20 years ago in Folkestone.

1074. Is

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1074. Is the supply to the London market altogether as great as it used to be?—I do not know.

1075. Is it in consequence of those interruptions by the French, and the frequent loss of your gear and your nets, that you and many others have been obliged to give up fishing?—Yes.

1076. Is it that way that you account for the depressed state of your trade at Folkestone?—Yes.

1077. Do you catch much less in consequence of the French being there, than you did at former periods?—Yes.

1078. If the French were not there at all, and you and the others continued your fishing trade as before, should you be able to supply the demand?—I think we should.

1079. If you who are there could not supply the demand, would not the consequence be that other people would take the business in hand till the demand was supplied?—Yes; I have had part in three or four luggers at a time in Folkestone, and now I have not got above one-half as much interest in them.

1080. Is the interest you have profitable, or is it a losing trade?—It is a losing trade.

1081. How long has it been a losing trade?—Five or six years.

1082. Do you think the fishing is gradually going down?—It is; formerly at the beginning of the herring season we used to get about 30 *l.* a last; and now, since there have been so many French come there, we do not get above 15 *l.* or 20 *l.*

1083. Is that because they supply the English market?—Yes; because those people supply them with fish at a lower price; and they will not give us any more afterwards.

1084. Has the French fishery very much increased since the peace?—Yes, I should think it has increased one-half.

1085. Could they go on if they did not enjoy our market?—Not so well as they do now.

1086. Are the French deriving a profitable trade or a losing trade, as far as you know?—I think it is profitable to them; every material is cheaper in France, and labour and every thing is done for much less than it is in England.

1087. Do you know at all whether mackerel and herrings generally are dearer in France than in England, or cheaper?—Cheaper, I think.

1088. Is not fish rather dear upon the Kentish coast, in consequence of its going up to London, and inland?—Yes.

1089. Have you any knowledge of the Frenchmen purchasing fish from the English?—Yes.

1090. What sort of fish?—Herrings, in the latter part of the season, when they have been of no value in England, and they have been of value in France; but they will not buy it now.

1091. How long was it ago that you spoke of?—Within four or five years.

1092. Do not they buy the skate from the English?—No, I do not think they do, they have caught and destroyed the skate almost every where.

1093. Do you know Sandwich Bay?—Yes.

1094. Have the herrings in late seasons particularly shoaled in Sandwich Bay, within about a mile of our coast there?—Within half a mile.

1095. Within that bay is not it usual for the French boats to come and sweep it all before them?—Yes; and I have known them sweep away our revenue vessels, and the small craft that laid in the inner Downs, the weight of their gear has swept them away.

1096. As far as you know do the Government vessels ever interfere to prevent their coming in so near to fish?—No.

1097. Some time ago there were complaints at Folkestone of the licences being restricted to a certain distance; do you know any instance within this last six or eight months of an extension of licences having been applied for by a man of good character, which has been refused?—I have not had occasion to apply for one, and I have not been interested in it.

1098. Does anything strike you that would improve the condition of your people, besides stopping the French system?—I do not know anything better than to send vessels to keep off the French vessels.

1099. You have said that the weight of gear of the French vessels swept along with it the revenue boats; in what way is that?—They are carried away with the tide.

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1100. Do you mean to say that the ropes or the nets strike upon the revenue boats?—The ropes and the nets together strike upon the cables, and sweep their anchors along, and that has been the case in Hythe Bay.

1101. In the London markets do you get good prices for your fish?—The price is very good, but we feel occasionally very much hurt to see them go to buy of the Frenchmen.

1102. Why do not you lay an information against the men that bought fish of the Frenchmen?—The law is not strong enough, unless I see them sell the fish here; it has been tried, and the collecter at Dover said, that if we could prove it he would seize the boat.

1103. Is this buying and selling from the French boats done openly or secretly?—Openly at sea, within half a mile of the shore.

1104. Is any attempt made to prevent it?—There was a little last herring season; I never saw any before.

1105. Do you ever prosecute the English boats who take it out?—No, never; because they consider the law is not strong enough.

1106. If directions were given to the preventive service to keep a sharp look out against those proceedings, and when they were detected to give evidence of them, with as much attention as they do to prevent smuggling, do not you believe that they could find sufficient evidence to convict the parties?—Yes; if I was stationed there in a revenue cutter in the season, I would not allow any such thing to be done.

John Goldsack, called in; and Examined.

John Goldsack.

1107. WHERE do you live?—At St. Margaret-at-Cliffe, about three miles east of Dover.

1108. Have you been concerned in fishing for many years?—I have not gone for the last two years; I am a little concerned now, because I am partly interested in a boat; but I had a boat of my own between 20 and 30 years.

1109. Since the peace, has your fishing been much interfered with by the French?—Very much, at different times.

1110. Within the last two years, since you left off fishing, have you yourself seen the French vessels fishing within a league of our shore?—Yes, and within a quarter of a mile.

1111. Frequently, or seldom?—Frequently; in the herring season, more than in the mackerel season; they regularly do it, night after night.

1112. Do they come within a stone's throw of the shore?—Yes.

1113. Do they come there willingly, or are they driven there by the weather?—They come there willingly.

1114. In your opinion, do they injure our fishermen by their interference?—Very much; I have seen it myself.

1115. Do they injure your tackle?—Yes, that is the reason we are frightened at them so much; they tear everything to pieces; their gear is so much heavier than ours is, and they tear ours all to pieces, and that obliges us to get away from them.

1116. Do you often lose your nets?—I have never lost my nets, but I have known others who have lost their nets; I have been obliged to quit the ground altogether. When they know where the fish are, they come so thick, close upon the shore, that they will not let the Englishmen fish.

1117. Do they ever threaten you?—They never threaten much; they generally act without threatening.

1118. Do they act in that way that it obliges you to leave off fishing?—I have been obliged to leave off.

1119. What obliges you to leave?—Whenever they come, the fish swim to the north side of the net, and they take care always to come upon the north side.

1120. Do not the English do the same thing to one another?—At times; but I never did it if I could possibly help it. I never did it in daylight in my life.

1121. Is it considered unfair among yourselves?—It is unfair altogether, when we go to sea in the middle part of the day; at night, when the time comes to put the nets overboard, the French have come in that way and forced us to leave altogether; they do it on purpose to annoy us.

1122. Do you remember being examined before the magistrates at Dover, upon some occasion?—Yes.

1123. What was the nature of that transaction?—It was two years ago; we went

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went from Dover in the early part of the afternoon, and went up off Hythe, and when we got our berth, we let go our anchor and rode there till shooting time, and then there was a Frenchman came and pulled up close alongside of me; then when the time came to shoot, there was another French boat at a distance; I went and gave the Frenchman the preference to shoot which way he pleased; he said, he would shoot for the English land, and I shot off the opposite way. Then the other boat, as soon as he saw us two shooting in that way, he began to shoot directly towards me, and after a little while we went off, we found it was of no use; and when he came in to us, we hailed to him, and we were obliged to get up our nets that night.

1124. Did he spoil your fishing that night?—He took it away altogether, and I went into Dover harbour; I shot a second time, and I got served the same way the second time that night.

1125. How near was that to the shore?—About a league, right off Hythe.

1126. Was it less than a league, or more than a league?—I cannot say, I think it is as likely to be less as more; but I could not say positively whether it was more or less.

1127. If you were to draw a line from one headland to another, would it be withinside of that line?—Yes, certainly.

1128. How long was the Frenchman's net?—About a mile.

1129. Have you any doubt that the inner end of that Frenchman's net was within three miles of the land?—Yes, I have no doubt that it was within two miles of the land, because the French boats shoot a good way.

1130. Have you ever tried to fish upon the French coast?—I have.

1131. How near?—About half-seas across, when I was interrupted just over the Ridge; there is a bank we call the Ridge, that is a little better than half-seas across. My brother and I went over there one night, and we shot our nets without any interruption. The French boats do not do as we do, because sometimes in the season the fish will not net; they know when the fish will net, and when they will not, but they are fitted out by merchants, and therefore they always go with lines and hooks as well as nets; then in the morning those boats from 100 to 150 sail of them came out in a body from Boulogne, and as they came near we endeavoured to get our nets in, because we knew what fellows they were; it was quite light, but however they catched us both with about half of our nets in the boat, and the other half out, and they went over us, and cut us from one end to the other; I think I had 15 or 16 nets torn, and some cut with a knife or some other sharp instrument, without any provocation at all.

1132. Did they say anything to you?—Nothing at all; they only laughed, and made game; they did it purposely.

1133. Do they ever prevent you from coming within a certain distance, or tell you what distance you may not go within?—No.

1134. Have you ever known their Custom-house boats act to keep our fishermen off?—I have often had their Custom-house boats come and search for smuggled goods, but not anything else.

1135. Do the French government keep any boats to prevent people coming to fish within a certain distance?—I never knew anybody that was interrupted except by the fishermen themselves; we do not dare go now more than 12 miles from the English coast; that is a great injury to our fishery.

1136. Why cannot you go beyond four leagues?—Because it is specified in our licence that that is our district.

1137. Are you aware that if you apply to the Custom-house you may get a licence to go within a league of the French coast?—I never applied; but I have known of others that have applied, and said that they could not get any alteration.

1138. How long was that ago?—Perhaps within these two or three years.

1139. Have you understood that a licence could be got beyond the four leagues?—That is the way it is specified in mine, and I never interfered any further.

1140. Is that the general licence that your people have?—That is the general licence among the small boats.

1141. Are those boats under 15 tons?—Yes.

1142. Generally speaking, have those boats upon your coast a four-league licence?—I know mine is, and I believe the others to be the same in general.

1143. Do you know any boats under 15 tons that have got a licence to go within a league of the French coast?—I do not know any.

1144. Do

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1144. Do you know any that have applied for an extension of the licence to go within a league of the French coast?—I do not.

1145. Do you consider it necessary to adhere strictly to the distance specified in your licence; does anybody take notice of your going beyond?—They never have interrupted me, but I have known one or two that have been interrupted; I know one boat of ours that was carried into Harwich, entirely in consequence of his being out of his distance, but he had nothing to do with smuggling, he was merely fishing.

1146. Do not herrings very much shoal in your neighbourhood in Sandwich Bay?—They do, very much.

1147. Have you known the French in particular to come and sweep away those shoals in Sandwich Bay?—Yes, many times.

1148. What mode have the French of ascertaining from our boats where the fish lie, and so on?—The French are quite as likely to find them as we are ourselves, because they are in the habit of shooting so near the beach at different times, after favourable winds.

1149. Do they interfere more with the herring fishery than with the mackerel?—A great deal more.

1150. Have you suffered from those interruptions and the loss of your nets and gear?—I never did lose my nets by them, but I have had many torn to pieces by them.

1151. In consequence of the interruptions you have received, has that determined you to give up fishing?—Not that altogether, but that and the badness of the season; there is not one in twenty in the last six years back that has got sufficient to pay his expenses.

1152. Do you mean to say that the last six years the seasons have been bad?—Uncommonly bad.

1153. In what fish?—The mackerel, and likewise the herrings.

1154. Is there a scarcity of fish upon that coast?—There has been for several years past.

1155. In your opinion is the breed of fish decreasing in the Channel?—It has done, very much.

1156. Do you not find the seasons vary with reference to the plentitude of fish, that one season fish may be plentiful, and the next season it may be very scarce, and the following year it may be plentiful again?—Yes, there are more mackerel this season at the present day than there have been for four or five years, it is not always a regular thing.

1157. Do you know much of the other fish besides mackerel and herrings?—No.

1158. What is the fish principally taken in that part of the Channel?—There are different sorts of fish, there are plaice and turbots, and soles and whiting, and many other sorts.

1159. Are there many turbot caught, or are they scarce?—They would be scarce if it was not for the Frenchmen; the Frenchmen bring them into Dover by hundreds, they catch them with a line the same as they catch whiting.

1160. Do they catch the greater part of the turbots?—They generally begin about the beginning of June, and they shoot their lines upon the Ridge, and I have known them to bring in 140 or 150 or 160 turbots in a morning in a boat, and to land them on Dover beach, and in the harbour too; I have seen as many as three or four boats in a morning with 100 or more in each of them.

1161. Does that happen once or twice a week, or most days during the season?—It happens two or three times a week, or oftener if the weather is fine; when the weather is fine they can lie upon the Ridge for a week, as long as they have provisions.

1162. Are not those fish allowed to come in duty-free?—I believe they are; they do not give above 2 *s.* for them, 1 *s.* 6 *d.*, and 2 *s.* 6 *d.*

1163. What sized fish?—Some are very small, and some very large, and they take them at so much a piece all round.

1164. Do they find a ready market for them at Dover?—I never knew them take any away.

1165. Are they mostly sent to London?—Mostly sent to London.

1166. Are there people at Dover that live as buyers of fish to send up to town?—Yes, there are many people at Dover that do nothing else but buy fish to send up to London.

1167. Supposing the French were not allowed to bring turbot into Dover market, would

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would your people catch turbot and supply the market?—The French will not let our people go and fish upon the Ridge.

1168. What do they do to prevent it?—They tear our lines and our gear all to pieces.

1169. In your opinion, do our fishermen want protection from them?—No doubt of it; but they have had nobody to protect them.

1170. Supposing an armed vessel was out in the Channel to protect them?—Then they would not suffer them to meddle with them; but our boats do not go there now, because the French man the Ridge from end to end in the season, or boat it.

1171. Do they principally send in turbots to the English market?—They send a great deal of it; but there are a great many boats; it is not all one catch.

1172. Then in your opinion, our fishermen cannot contend against the superiority of the number and force of the French?—They cannot.

1173. In your opinion, would any armed vessel out in that part of the Channel be a sufficient protection to our fishermen, supposing that they were to get there first?—If the Frenchmen would act fair and the English act fair, there is room for both parties to lay their lines; but the Frenchmen will not fish fair; it is the Boulogne boats particularly that are the greatest evils.

1174. If the Frenchmen have the sale almost exclusively of the turbot at Dover, have they not an interest in preventing our fishermen from coming into competition with them, in order that they may engross the whole of the turbot fishery?—Yes, they do so; where the English bring in one turbot, I suppose the Frenchmen bring in 10, in the season.

1175. Have not you stated that the Frenchmen are in such numbers as to cover the Ridge altogether?—So they do; but there would be room for both; there would not be many English boats, and they could lay the lines upon some part, if the others would let them alone.

1176. In what way do they destroy the lines?—They are obliged to have buoys at both ends, and their lines reach a long way; sometimes a mile.

1177. Do you know anything of the sprat fishery on your shore?—There is not a great deal of sprat fishing upon our shore, except now and then.

1178. Do you ever fish for sprats for manure?—Not in our neighbourhood; but many do.

1179. Do you know anything of the season when fish spawn upon your shore?—The herrings and the mackerel always spawn upon our shore; the mackerel will spawn in about a fortnight's time, as soon as the weather sets in fine; the mackerel spawn about the beginning of July.

1180. Is there any dredging upon your banks, so as to injure the spawn and breeding of fish?—We have no banks very near; the smacks are generally at work about the falls, about seven or eight miles out, where the trawlers were.

1181. Do the people dredging or trawling interfere with the spawn of the fish?—I cannot say as to that; but they disturb everything upon the ground, because their nets are constantly upon the ground.

1182. Is there any canvass in the bottom of the nets, or any mesh that is very small?—Not in the trawl-nets, but in the stow-boat nets.

1183. What is the size of a stow-boat net?—You could not get a pen through it; it will stop everything but water.

1184. Do they drag the grounds with them?—No, they set them under the vessel's bottom; they have a large hanging cable.

1185. Do they catch much in those nets?—They catch vessel loads; and those are the people that bring them in for manure.

1186. Do they catch small fry?—Yes, not bigger than a pin or a needle; they have a large anchor, and the net goes with two beams, and it is boused about a fathom from the ground, and they have a rope upon each bow, so as to keep the net always open, and in that net they catch everything.

1187. Do they go on with that fishing the greater part of the year?—No; in the latter part of October, or the beginning of November, from that on to Christmas; they do not begin the stow-boating till about the latter part of the herring season, in November.

1188. Do they catch a great many sprats?—They catch an immense number, vessel loads.

1189. Is it for manure?—Yes, they catch it purposely for that, and for nothing else.

1190. In

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1190. In your opinion, does that injure the breed of the fish?—It certainly must injure the food; because the big fish feed upon the small fish.

1191. Do you happen to know what fish particularly it is that they catch the small fry of?—I cannot tell; they are so very small that they are almost similar to a sprat, they are little things, like a little bit of wire.

1192. Has the sprat fishery increased much of late years?—Very much, in consequence of the people buying them for manure.

1193. Are those nets with fine meshes entirely confined to the sprat fishery?—Entirely.

1194. Are not the trawls made with very small meshes?—Yes, but they are nothing like the stow-boat nets, they will not take any of those small fry.

1195. What price do they give for the sprats for manure?—A shilling, and sometimes 15 *d.*, and sometimes as high as 18 *d.* a bushel.

1196. Is that very much used upon the land?—Very much, about our village; I have known some of our farmers manure as much as 20 acres a year with sprats only.

1197. Does that last for several years?—I believe they do not do much good after the year; but they do not lay above 40 bushels upon an acre.

1198. How long has that been done?—It has been some time, but not so much as it is now; I do not remember it above 10 years about our part.

1199. You said that some farmers manure about 20 acres with sprats in a year, upon what sized farm is that?—Upon a farm of 400 or 500 acres.

1200. Did you use to send your fish to the London market?—I never sent fish to the London market upon my own account; but I have sold hundreds of pounds worth to come to the London market.

1201. Does the fish from your neighbourhood mostly come to the London market?—It does.

1202. By water or by land?—Both; but by water chiefly.

1203. Do the London dealers send their carrier-boats to buy out of the fishing vessels?—I think yesterday morning I saw as many as five or six that belong to the river.

1204. Have you ever seen them buy fish out of the French vessels?—I have, several times.

1205. Is that done openly or secretly?—They do not stand very nice about it; I have known them do it in Broadstairs Roads, in the herring season, and once particularly; the French boats came in with herrings, as deep as they could swim, they laid the vessels alongside: the fishermen went on shore and complained of it to the revenue officers, but they would not interfere, and so the fishermen took the cause into their own hands, and drove them all away.

1206. How long ago was that?—I think about six or seven years ago.

1207. Do you know whether it is a general practice to buy out of the French boats for the English market?—I do not know what it is now; but before it was as frequent as it could be.

1208. Should you have continued the fishing business if it had not been for the depression of the trade?—I should not have left it if the seasons had been better than what they are, but it will not pay.

1209. Do you consider that it was a profitable trade or a losing trade?—It was a good trade some years ago, but now it has got to be one of the worst trades that can be; between the interference of the French, and the shortness of fish, you cannot get enough to pay your expenses.

1210. Then there are fewer people employed in the fishing line than there were?—I think some time back there were 30 boats at Dover, now there are two; and there used to be as many as five or six at our little place, and now there is one, and there used to be 22 or 23 at Kingsdown, and now there are eight or nine.

1211. What number of men do those carry?—Upon the average about five men.

1212. Are there fewer lads and young men brought up to the boating line now than there were?—I do not think there are above two or three at Deal where there used to be 40.

1213. What is the case at Dover?—Only two out of 30 as I can remember.

1214. When you send your fish from Dover inland to London, do they travel with post-horses?—Yes, they have got regular carriages to bring them to Canterbury, and there it is put into other carriages.

1215. You have stated the mackerel season to last about 10 weeks, and the herring season

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season about six weeks; what is the employment you find for that description of fishermen for the rest of the year?—The people at our village all work upon the farms, except in the mackerel season and the herring season, when they think they can pay themselves better than by working at daily labour.

1216. Do you know how the Dover people employ themselves, when they are not employed in fishing?—They go hovelling, they go out looking for ships in the Channel and assisting ships in distress.

1217. What do the French fishermen do when they are out of employ?—They are employed all the year round, there is no time of the year when there is not some fishing.

1218. Do not you make your own nets?—No; I can have nets fetched from Bridport that a man would not earn 6 *d.* a day in making.

1219. Have you ever tried to make your nets at home?—I never tried; but there are a good many that do it that have got large families.

1220. In your opinion, would it tend to re-establish our fishery if the French interference within a league of our coast, could be prevented?—It would do them a good deal of good, particularly in the herring season.

1221. Do not you think the Frenchmen are better fishermen than the English?—I think they are, without exception. In the first place, every boat with five men must have a boy in all French boats, and therefore, they are brought up to it from their cradle, and they learn the business before they are able to do it; but our people are only brought into it when they become men.

Veneris, 20° die Junii, 1833.

JOHN HALCOMB, ESQUIRE, IN THE CHAIR.

Mr. *William Breach*, called in; and Examined.

Mr. *William Breach.*

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1222. YOU are a fishmonger at Hastings?—Yes.

1223. And you have been a practical fisherman?—I was 24 years a fisherman.

1224. What is the state of the trade at Hastings now with relation to fish, prosperous or not; is it in an improving state or not?—It is upon the decline.

1225. Very much?—Very much on the decline.

1226. State to the Committee what number of boats are employed now?—About sixty.

1227. What is the largest number you can recollect?—I remember 104.

1228. How long since?—In 1811.

1229. What number of men do the 60 now at sea employ on an average?—From four to five each on an average; none less than three, and 40 of them five.

1230. The men and boys are at present about 240?—Yes.

1231. And at the period you speak of there might have been 480; therefore the men employed in the fishing trade are decreased one-half, within how many years?—Since 1811; and we could find 200 more standing idle.

1232. Do the fishermen on the coast you are acquainted with resort to any other employ when they are not at sea?—Nothing but repairing and mending their nets.

1233. Have the goodness to state to the Committee what are the principal grievances complained of at Hastings?—The principal grievance is in being annoyed by French both in catching and going into the market, and by the French hovering on our coast, supplying this market.

1234. Do they fish close in shore?—I saw the French within a fortnight within a quarter of a mile of the shore, with their nets down, fishing.

1235. Do our boats fish as close?—Our boats do; our boats fish at this season of the year as close as the rocks will let them go.

1236. Is it your opinion that that is injurious to the breed of fish at all?—Certainly; by taking the small fish, it necessarily injures the breed of the fish.

1237. Would

1237. Would it be, in your opinion, a beneficial arrangement that the nets should not be laid down so near to the shore?—It would be no disadvantage at all, if the net was a proper size to let the small fish through: there are some large fish generally intermixed with the small fish; but they are particularly small when you take them near to the shore.

1238. Will you be good enough to state to the Committee where the principal trawl fishery is at Hastings?—The principal trawl fishery at Hastings is from 10 miles out to 25 miles at sea; never exceeding 30 miles out.

1239. Do you catch as many small fish when you are that distance out at sea as when you are lying in shore?—No.

1240. You can state whether it would not probably be beneficial to the growth of fish, if they were prevented from fishing near shore?—If they were prevented in certain months.

1241. What are those months?—There is June, July, August and September, when the fish come near the shore to spawn; and that leaves the small fish on shore.

1242. You are speaking of flat-fish now?—All flat-fish.

1243. It therefore would be desirable that the nets should not sweep over the spawn at that time?—If they did, the nets should be large enough to let the small fish through.

1244. Does the present construction of the trawl-net at all interfere with the small fish?—Yes.

1245. How is that?—It is not fitted up in the way to let the small fish throu gh if the mesh was made according to Act of Parliament; the fore and aft vessels fish with outside lines, and though the net is 3 inches or 2 ½ inches mesh, it becomes straight, and lets nothing through; if it was fitted up in a proper mode, with side lines to reduce the net one-fourth, that would open the mesh square, and there would be a passage for the small fish: the vessels from Torbay, and other vessels, use a net with outside lines.

1246. Contracting the meshes, and preventing the small fish from getting through?—Exactly so.

1247. Are those mostly the Torbay boats?—Torbay and London vessels; and French vessels never have a side line; they fish with a straight net, and there being no lines to contract the mesh it becomes like a parcel of ropes, so that a fish as big as a shilling cannot pass through the lower part.

1248. You have seen nets emptied of this sort full of small fish?—Yes.

1249. Nets of the same size, not having these ropes, will not retain the small fish?—They will not stop the small fish.

1250. What months is it that you think it is mischievous to fish in?—May, June, July and August are the spawning months.

1251. Do you think that it would be beneficial to restrict the fishing in these months?—It would be beneficial, no doubt.

1252. Within what distance of the shore?—Within four miles of the shore; there the small fish will lay.

1253. Has it come to your knowledge that there has been any mischievous interference of the French boats with us?—We have had several fleets of nets carried into Dieppe and Boulogne.

1254. When?—During the last season.

1255. Have we not got them restored?—We have got some of them restored, but at a great expense.

1256. Have not the authorities in France behaved very handsomely?—The mayors of Dieppe have behaved very handsomely to us.

1257. With regard to the sale of French fish; do you know any particulars relative to that?—I know that it is frequently trafficked, and is more carried on now than ever it was; I have seen it myself frequently.

1258. To such an extent as to interfere with our market?—Yes, for the French hover along our shore to supply our market. If he had not our market to apply to, he would be nearer to his own home and to his own market.

1259. Have the Custom-house, in your knowledge, at all interfered with this practice?—They do, if it is within their limits or sight.

1260. With regard to the licences; have the boats, in your knowledge, any difficulty in the getting licences now?—Not now, but they had.

1261. In fact, the fishing-ground was without the limits of their licence?—Yes.

1262. Still they used constantly to fish there?—Yes, but last season we were made

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made a seizure of, being out of the limits. I applied to our Custom-house to get me a certificate during the last herring season, when we had 20 boats lying in the bay, and the wind turning round to south-east, the fish got into the Channel sea. We could not go there. We applied to the Custom-house officers, and asked them whether they would take us if we were out of the limits; they said yes, or they would not be doing their duty, and then we were obliged to lay by until we got these long licences.

1263. They have extended how far now; as far as you wish?—Within one league of the French and Dutch coast; quite sufficient for us. In the winter time, when the water is getting cold, all fish fly into deep water; then no fish are left in the river, and we are obliged to go out of those limits all the winter long.

1264. What limits do you mean?—Four leagues; they are all beyond four leagues.

1265. What part of the year do you call the winter season?—From Christmas to March, and the cold season comes in.

1266. And November?—The water is warm then; the sea at this time is almost as warm as milk, and that does not get chilled till towards Christmas, when the cold weather sets in.

1267. The Committee understand that you consider the present form of trawl-nets, if not having side lines, is very mischievous to the breed?—Very mischievous.

1268. If the side lines were attached, it would suffer a large portion of the fry to get through?—It would let the small fish through, which are now killed.

1269. Have your boats all such lines?—All the Hastings boats.

1270. Do these side lines do mischief in letting valuable fish through?—Not at all.

1271. What is the size of the mesh?—I am not certain, but I think it is two inches or two and a half inches; there is an Act of Parliament mentioning the exact distance.

1272. Is it not smaller towards the tail of the net?—That is to stop the small fish; every fish when he goes into a net goes bang to the bottom first, afterwards he traverses back.

1273. What do you mean by traversing back?—He tries to get out. There is a reverse stoppage in the net, and he comes up along the outside of the net, and instead of getting out he comes up into the bag of the net.

1274. Have you any suggestions to offer to the Committee with regard to any other point?—Nothing particular; that is the most injurious to the fishery.

1275. Is there any mode that strikes you in which the traffic of fishing, direct out of the French boats, could be prevented?—Yes.

1276. How?—If you gentlemen would take as much consideration of that as you do in preventing smuggling, you would be sure to have it stopped.

1277. In your opinion, would it prevent the practice if a law was to be made making it the forfeiture of the boat in the penalty, if any English boat takes fish out of a French boat?—That would help it, and another thing would be of little service. It is not every man that would take a false oath: they are always obliged to make a return; if a man was to make his affidavit that the fish were taken out of a British bottom, or else were caught by himself.

1278. Would it not be right to make them specify out of what English vessel it was taken?—Yes, and the fishermen might be furnished with a check, to give him the quantity of fish he delivers to him.

1279. Do you mean that all English boats, when they take a cargo of fish out of a foreign bottom, necessarily make a return to the Custom-house?—They come to the Custom-house and pay the fees; 1 *s.* 6 *d.* or 2 *s.* at the market-office. If they do not go to the Customs, some man attends them and takes it.

1280. There are many other parts of the coast where this is done, where there is no Custom-house; for instance, Folkestone?—Yes, but we are speaking of the London market now; but there is an officer on the station, either a boat officer or a Custom-house officer.

1281. So that if proper directions were given to them you think it might be detected without much difficulty?—Without any difficulty. There are a number of vessels now employed in looking after the blockade system: if a couple of men from these fishing towns, who understood the traffic, were put on board these vessels in the months of herring and mackerel fishing, there would be no danger of foreign fish coming to London; they would be sure to catch them.

1282. That is, if the fishermen were put on board the Custom-house vessels that cruize

cruize about?—Yes; if a couple of men were appointed in those seasons, they would be sure to catch them.

1283. What months are those which you would call the fishing seasons?—October and November are the two months for the herring season, which would be sufficient.

1284. They trawl all the year round?—Yes; but they do not hinder us by the trawl.

1285. You said that two men should be put on board in the fishing season; what months do you mean?—In the herring season; in October and November.

1286. Would it be sufficient if you had them during these months, and for no other portion of the year?—They are more injurious in these months than at any other period.

1287. When is the mackerel season?—April, May and June.

1288. Would you not think it necessary to have men on board the Custom-house boats during these months?—Yes.

1289. Should it be from May till October?—No; April, May and June are the three months for mackerel.

1290. What fish do you catch during July, August and September?—All ground fish; turbot, brill, soles and flat-fish, which we take with a ground net all the rest of those months.

1291. Do the French interfere with that fishery at all?—Only in coming into our bays, and carrying away the small fish.

1292. What do you call the fish that you catch during July and August?—The ground fish.

1293. When you reckon distance from shore, do you reckon from the shore itself, or from a line stretched from headland to headland?—From the shore itself, and our bays.

1294. But do the Custom-house reckon from the shore or not?—They went from the headland; from Beachy Head or from Dungeness.

1295. Is it not the case that the French prevent us from coming within how many leagues of their coast?—Within three or four leagues; they tell us we must not fish there; we have been driven away when we could scarcely see the land, by their guard of coast.

1296. Not by the fishing-boats themselves, but by the government officers?—By the government vessels; by the French guard of coast.

1297. Do you mean at some particular season?—Not any particular season, all the year round; if they find us there they order us off.

1298. Do your people ever go to the Mint Channel, to the Bank, where they catch turbot?—That is our best place for fishing.

1299. Do the French fish in common with you, or keep it all to themselves?—They fish on it in common with us.

1300. Do they attempt to injure you or destroy your nets?—Our drift-net swings with the tide, and if it comes near them they cut it asunder; their ground-net is on the ground, and our net drives up athwart them, and they clear themselves by cutting us away.

1301. Do they lie at anchor when they are fishing there with their ground-nets and lines?—With their lines they do.

1302. Do you, or do you drive with the tide?—We never lie at anchor, we drive.

1303. So that is the cause of your nets coming foul of each other; the one party lying still and the other driving?—Yes; but they sometimes get foul of us when we are all drivers; when we are going to shoot on a flood tide, they will come along on the east side of you, and drive the ground right before you; in our terms we call that a very unfair way of fishing.

1304. What are your rules on those occasions?—Our rule is to give one another a fair berth.

1305. State the distance?—About three quarters of a mile, or a mile.

1306. They do not keep to that rule so strict as the English fishermen do?—They take the advantage of the larger ground; they would foul your net if it was overboard, and would then get on what we call the fishing side of you.

1307. Do you ever retaliate, or do the same thing?—No, they are larger craft than ours, and we are afraid they would do us some injury.

1308. And they have more men on board?—They have 12 or 13, whereas we have but four or five.

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1309. Are the French fishing vessels under the regulations of their government?—Yes: they are obliged to take so many men and boys, according to the tonnage.

1310. What is the tonnage generally of the French vessels?—From 30 to 80 tons.

1311. You are concerned a good deal in the sending fish to London?—Yes.

1312. Are there any difficulties in that that might be beneficially removed; do you meet with impediments or difficulties in the transmission of fish to London?—No, I think not.

1313. You have the benefit of escaping the post-horse duty?—We had a trial upon that.

1314. What was the result of that?—It was done away with.

1315. Do you pay turnpikes?—Yes.

1316. Would it be any material relief to you in sending your fish inland, if the turnpike-tolls were taken off?—Wonderful; and it would be very beneficial to this city; for in consequence of the expense of the turnpikes, we cannot send our inferior fish to London; there would be a great deal more of the fish that the lower classes could purchase if the expense of travelling was lessened; the gates are a very heavy burden on us.

1317. Do your fishermen very often send up inland cart loads of fish?—Yes.

1318. How often in a week, do you think?—Every day.

1319. One or more carriages a day?—Sometimes 10.

1320. What, all the way from your place to London?—Yes.

1321. And by post-horses?—By post-horses.

1322. About 16 or 17 years ago, was your fishing trade then in a prosperous state?—Yes.

1323. How many loads did you yourself send in the course of one year to London?—In the course of four years we averaged 1,600 loads; that is 400 a year.

1324. What years were those?—They were the years from about 1812 to about 1816.

1325. Can you give the Committee any information as to the number of boats you now send in a year?—Our fish is conveyed, a great deal of it, in a different way now; then we had no great luggage vans on the coast; one of these luggage vans, when loaded, would make three loads of what we used to call a pair-horse load.

1320. Now you send a good deal by the vans?—We load two of these large vans, and they will take about six two-horse loads.

1327. Do they travel with four horses?—With four and six horses.

1328. When loaded with fish, do they pay the post-horse duty?—I do not think they do.

1329. They are not post-horses, I believe?—They are not post-horses; they are horses kept for the purpose, going from stage to stage, the same as stage-coach horses.

1330. Can you tell me what on the whole is the number of van loads that you send per year, and how many common cart loads?—I could by my books. Some days we send five or six loads, besides the two van loads, and sometimes not more than one or two, according to the catch; sometimes when these luggage vans are loaded, and all our two-horse vans are loaded, we put 30,000 or 40,000 on board a vessel, when there is a great catch.

1331. What fish are you now speaking of?—Both herrings and mackerel.

1332. In your opinion would the price of the London market of herrings and mackerel be reduced if the turnpike-tolls were taken off carriages travelling with fish?—I think it would, and we should be able to afford to send up more of our coarse fish, which is some of it made a spoil of; the expense is so great, we cannot forward it to the market.

1333. What portion of fish is wasted in consequence of that?—A great quantity of coarse fish, some of it goes for manure in consequence.

1334. Do you sell that to the poor of Hastings?—We make the best of it we can.

1335. Do the poor people live much on fish?—At this time they would be very bad off at Hastings if it was not for the fish; our fishermen are very liberal, and no poor tradesman goes down and asks for a bit of fish and goes away empty handed; they are never refused if they have any to spare. I think I have an old Act of Parliament at home, which specifies that the fish should go to London toll-free.

1336. Can you tell me the date of that Act of Parliament?—It was renewed in the 19 Geo. 3.

1337. But

1337. But you do get some exemption now, do you not?—Not a bit.

1338. I thought you did on one or two of the trusts?—We did, but they have charged it us again.

1339. If you were to have a van and put post-horses to it, and carry solely fish, would you not be exempted from the duty?—Yes.

1340. You never on your coast catch fish for manure only?—No.

1341. Do the spread nets at all interfere with the breed?—I think they do.

1342. Are there any quantity of them?—There are a great many fishermen who do not destroy the breed, who are stow-boat fishermen, and their net does not go to the bottom; it is only about midway in the water, and is sometimes on the surface.

1343. In your opinion, does the stow-boat net injure your fishing?—I do not think it injures any part of the ground fishery, such as brill, soles and turbot; but I think it does the herring fishery and the sprat.

1344. When the young fish are growing, and are about the length of your finger, does not the stow-boat net catch a greater quantity of these fish?—Yes.

1345. Does not that injure the herring fishery?—Yes, the herrings; but it does not catch the small ground fish.

1346. Does it not very often go on the ground?—No.

1347. Are you of opinion that it injures the young fish much?—I do not think it injures the small ground fish on the sand.

1348. The stow-boat net does not go quite to the bottom?—No.

1349. Have you known the French fishermen come to catch bait for the lines in your grounds?—Yes.

1350. How lately?—Why, every day; if you were at Hastings you would see them.

1351. Do you mean close to the shore?—Yes, wherever it suits them; sometimes within half a mile or a mile.

1352. You are speaking now within a league?—Within a league, frequently.

1353. Every day I might see some of them?—Either at that or at a further distance; they are in the bay every day.

1354. In your judgment, does what the French do, injure your breed of fish; disturb it?—Certainly; what they carry away small cannot be left for us to take it when it is large.

1355. Do you yourselves avoid doing what the French do; would the Hastings fishermen think it right not to fish there in order to save the breed?—They do not at present.

1356. Is their reason for not doing it, that they will not interfere with the breed of the fish?—If they were not to come within those boundaries, they would not kill the small fish.

1357. In your part of the Channel, is there a greater scarcity of fish than there used to be?—Yes.

1358. Very considerably so?—Yes.

1359. Of what kind?—Of every kind of ground fish. When I was a fisherman, I used to bring to shore more turbot, brill and soles in one morning than all our boats do now; many of them will be 24 hours at sea, and bring ashore not more than two or three gallons. In the years 1813 and 1814, I could go and bring ashore five or six bushels.

1360. That was a common thing, was it?—Yes, it was.

1361. Can you account for the scarcity?—Yes.

1362. Be so good as to state how you explain this scarcity?—Why, the fish is caught and destroyed when it is young, and it cannot grow bigger, and that keeps the ground from being stocked with the breed. On the other hand, where there used to be one Frenchman hovering on our shore, there are now 50; then we hardly ever saw a Frenchman among us. There was 20 years of war, when we never saw a Frenchman; but ever since the war has been over, they have been crawling a little nearer and nearer, until they have come right into our harbour and in the Downs; when fishing for herrings, they have shot their net on the beach.

1363. Is it done openly, the buying of fish out of French vessels?—No more openly than that last year they came into Broadstairs Roads, and delivered their fish as a collier would deliver his cargo.

1364. What was the cargo?—Herrings and mackerel; I think Mr. North had a certificate from the blockade officer at Broadstairs about it, with the master's name of the English vessel, with the vessel's name.

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1365. Did anybody complain of it?—I complained of it.

1366. Who to?—To the Custom-house,

1367. Will they interfere to prevent it?—They will.

1368. Why did they not?—There was the blockade officer on board of the English vessel when she took a cargo from the different French boats.

1369. Did he try to prevent it?—He informed against it by letter to the Board; it was not prevented, it went to market.

1370. Was any punishment inflicted on the English party who made this purchase?—None.

1371. Do you happen to know what the reason was why the Custom-house could not punish them?—I do not know.

1372. Will you state to the Committee what you know about the English boat in which the men were destroyed?—I do not know anything about it, further than from hearsay.

1373. Did you ever know the French to carry away a vessel of ours into their ports?—I have heard of it.

1374. But you do not know it of your own knowledge?—No.

1375. What boat do you allude to, an Aldborough boat?—Yes.

1376. Can you suggest any alteration of the law that would improve the condition of your people at Hastings?—I really do not know that I can; I do not know anything more than I have stated. It would be much to their interest if you could protect the seed of the fish, that would be beneficial to them and to the buyer at the market; it is like turning too many stock on a piece of land where there is not keep for them.

1377. Would it be a great advantage to you if the French were kept from coming within a league of our coast?—Certainly.

1378. In case the French did not come within a league, in your opinion have you a fishing strength enough to supply our English market?—Plenty; we have plenty of men who would be glad of the berth if they could live by it.

1379. Could you supply the English market with all kinds of fish?—Certainly.

1380. Do you catch any eels in your part of the Channel?—We catch plenty of conger eels.

1381. With respect to turbot in particular, do the French now import many turbot in your neighbourhood?—Not in our neighbourhood.

1382. Do they bring turbot on to your shore?—Yes; but we tell them they should not sell them, and then they take them away; they do go into Dover very frequently.

1383. Supposing a duty was now to be imposed on turbot brought in by the French, in your opinion would the English catch of turbot sufficiently supply our market?—Plenty.

1384. Do you think that the supply would be the same as it is now from the English and the French?—It is only just a particular month or so; it is not a regular supply like the English.

1385. How do you account for that?—They are prevented taking them in certain months.

1386. Is that the early part of the year or not?—Now, just at the present time.

1387. If the French were cut off from our market altogether, and were not allowed by law to sell in this country, would they come and take that species of fish on our side of the Channel?—Not so much, for they would not have a market; the market entices them to our shore.

1388. Do you consider that the great market for the French for turbot is the English market?—They have a market of their own, but ours is a better market than theirs, otherwise they would not come here.

1389. Do the French buy many skate, and take them over to France?—They do a little, if they can get it; they are prohibited from doing so by their own government.

1390. Do they change their turbot for the skate?—I do not know; they may at certain times.

1391. So far it is advantageous to the fishermen, is it not?—They are sure to make the most of an Englishman if they can. What entices an Englishman to give them his skate is generally for a little brandy. We have sold mackerel and herrings to the French.

1392. Do not the French buy skate and other fish which the English do not eat?—I dare

—I dare say many of the gentlemen are very fond of crimped skate; all of our inferior fish goes to feed the poor.

1393. What do you say to the dog-fish?—That is useful, if you take the trouble to take the oil from it.

1394. There are a great many fish that the French eat which the English do not?—There are; but you cannot get a good price from a Frenchman; what the French take from us they give but a very trifle for.

1395. The dog-fish is very oily, is it not?—The fish itself is not; the liver is very oily.

1396. Do you consider the French market for skate and inferior fish to be of no value at all?—No value at all; our fishermen get a little brandy for it; and it does more injury than good.

1397. Do they catch lobsters and crabs on your coast?—Yes.

1398. Do they not use the offal fish for bait?—Yes; the middle part of the maiden skate is the best bait for a lobster or a crab.

1399. Do you mostly make your own nets in your neighbourhood, or get them from Bridport?—We get the boats from Bridport, and frame the net at home.

1400. Are your fishing-boats all private property?—Yes.

1401. Are they insured?—No.

1402. Is there anything you have to complain of as regards the London market in not getting a good price for your fish; is there any monopoly in the market that ought to be done away with?—I do not know of any thing; but like all other things, the prices are not equal to what they used to be.

1403. Is your fishing trade now a losing concern or not?—A losing concern; I do not suppose that there is a fisherman in Hastings who has paid his bills for the last two or three years.

1404. Then it has been a losing concern?—Yes, for the last seven years. In the war I fitted out seven boats myself, now I have only four; and I would not keep them on was it not for the apprentices whom I have brought up.

1405. The French vessels are of a much larger scale, and heavier than the British vessels?—Yes, a great deal; we have vessels in different employ of as much tonnage as theirs, but not in our line of fishing.

1406. They are under the regulation of their government, as to the number of men they are to carry?—They take so many men, according to their tonnage.

1407. Can you tell us whether their vessels are government vessels or private property?—I think they are private property belonging to merchants, the same as the Lowestoff and Yarmouth property.

1408. Why, on your coast, do you not have vessels of a larger tonnage?—We have no harbour that would protect us; if we had a harbour, we can have better craft and at a less expense. Every time we launch our boats it costs us 5 *s.*; if we had a harbour we should have nothing to do but to hoist our sail, and away we should go.

1409. Is your coast such that it is not practicable to have a harbour or any protection to get you in and out easy?—There is a very good coast for a tide harbour.

1410. You have no protection?—We have no protection whatever, only the open sea.

1411. What do you do with your boats?—We haul them up on the beach.

1412. What is the largest tonnage of the French vessels?—I have seen them on the stocks at Dieppe from 70 to 80 tons. In the southern part of France they are all large craft, but at Boulogne they run from 25 to 30 tons; but there are as many from that harbour as 130.

1413. Can you tell me what the French fish is paid for with; do you pay for it in money or in goods?—We pay them in hard specie.

1414. It is not carried on by traffic?—No; the Frenchman must have the sovereigns or we will not have his fish.

1415. Do they not sometimes give credit?—No, they pay all ready money; if they do not pay ready money they leave a man until such time as the money is paid, and then they give him up. When our people sell to them, if they have not money they leave a Frenchman, but if an Englishman buys of the French he pays his ready money.

1416. Do the French ever take an Englishman instead of money?—No.

1417. Are there people known upon the coast who traffic in this way?—Yes, no doubt of that.

1418. It is not done with secrecy?—They are not very shy now; they have got hardened;

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hardened; they have even carried it ashore at Broadstairs, laying close in shore, and sent it by waggons, by land carriage.

1419. How lately?—Last year.

1420. Could people on shore see them put the fish from one vessel to the other?—You could see them shift the basket from one vessel to the other.

1421. Did it go up by land or by water?—They have carried it by waggons, but usually by water.

1422. Is the system going on at this moment?—Yes; there was French fish at our market this morning.

1423. At what market?—The London market.

James Cornish, Esq., called in; and Examined.

James Cornish, Esq.

1424. WHERE do you reside?—At Blackhall, in the county of Devon.

1425. How long have you resided on that coast?—All my lifetime.

1426. What age are you?—Sixty-five.

1427. Has your attention for some years been directed to the state of the fishing interests on your own coast?—I have paid a great deal of attention to it for the last 20 years.

1428. And also to the habits of the fish?—Yes.

1429. And have you been about recently to publish a treatise on the subject of the Channel Fishery?—I have done so.

1430. When did you publish your treatise?—Some five or six years ago.

1431. Have you now another manuscript ready for publication?—Yes, I have; it is connected with the general history of Zoology.

1432. Are you aware of the fact, on the Devon coast, of the decrease of the supply of fish?—It is the universal complaint of every body.

1433. Have the goodness to state with what part of the coast you are most intimately acquainted?—I lived at Teignmouth about eight years; after that I lived at Totnes, and I have been occasionally acquainted with all the coast in that neighbourhood.

1434. Are you aware that a few years ago the subject of preventing fishing with trawl-boats at a particular season of the year, was taken up by Mr. Vernon, in your neighbourhood?—Yes, I am.

1435. Have you been from time to time in communication with that gentleman on the subject?—I never saw him or heard of him until he wrote me a letter in consequence of my publication.

1436. That same letter you have submitted to the Committee?—Yes.

1437. Have the goodness to state to the Committee your observations as to the scarcity of fish in that neighbourhood, and any remarks you may wish to suggest, that would be desirable, in order to restore the breed of fish, or to renovate our fishing interests on that coast?—You must observe that, in the first place, there are two circumstances on which I have made remarks, and they both originated in accident. First, with regard to the fishing too near the shore. About 20 years ago I was at Stokenham, looking at the men drawing the seines, and a man of the name of Pope, whom I had known before, came up and spoke to me; I asked him how the fishing got on; he replied, "Very well, if it was not for the Slapham boats." I said, "What have they to do with you?" he replied, that when they discovered a shoal of mackerel the trawlers dashed in and tore the net to pieces, letting all the fish go; the motive they assigned for it was, that the sale of the mackerel caught by the seines injured the sale of the fish caught by the trawl, which was flat-fish. I told him such conduct as that was liable to an action, but he said they could not tell who were the parties, for the men had nailed boards over their name at the stern of the vessels, so that they could not be found out. He asked me if we could not keep the men from coming too near the shore. I told him when I got home I would see if there was any Act of Parliament applicable to it. I found by an Act of Parliament of Charles 2, that they were prohibited from coming within a league and a half of the shore. The people came to me and asked me to prosecute, after they had boarded a trawler and ascertained the name of the owner. I took Mr. Dampire's advice, and he said we could do nothing but through the Attorney-General. There was a prosecution, and the men were convicted for coming within the distance. It was by accident that I went on board of a trawler, and I saw the contents poured out on the deck, and there were thousands of all kinds of flat-fish, turbots, soles, plaice and every thing of the kind. I thought

that ought not to be, and I looked into the Acts of Parliament, and there I found that by the several Acts the mesh of the net should be three inches and a half broad, diamond fashion, extending from end to end. Instead of that, I believe their mesh is so small that nothing can pass through it but water, consequently all their fish, thousands of the smallest size, were destroyed, all thrown back into the sea. It appeared to me that this was a most grievous offence. You will find by Act of Parliament, that it is an offence to destroy the fish, by the Act of Geo. 2. The legal offence in the Act is, not to exchange, to bring to shore, or to sell. They throw them all away, and destroy the whole.

1438. This is not made an offence by the Act?—No; but it ought to be. The two great things are, first of all, to keep these men beyond a certain distance from the shore; and secondly, to have a net of sufficient dimensions to allow all the small fish to escape.

1439. Are you aware that the different Acts of Parliament which are on our statute-books, in reference to what you now adverted to, are in practice inoperative, by reason that a prosecution must be commenced by the Attorney-General?—Entirely. Mr. Justice Wooller and Mr. Vernon tried to put an end to it, but that was impossible. It is necessary to make a few observations on the mackerel and herring fishery. It is impossible you can legislate for either mackerel or herring, they are what the law calls passing fish, here to-day and gone to-morrow; and you are allowed to catch them on the Sabbath. The mackerel are caught first of all with the drag; you may observe a little bit cut off the tail of the mackerel, which is used as a bait to imitate a little fish which is called a bret, and with this they catch the mackerel by the hook; the quantity that is so caught is not worth mentioning; they make no distinction in taking them by the hook or the net; the great mass of mackerel are caught by the seine, they come in shoals, and you can see them playing on the surface of the water; people are stationed on the hills to make their observations, and when they come within a certain distance of the shore, they are encircled by those seines and drawn ashore. No man knows where they breed or where they come from; they are supposed to breed in the North Sea, but no man knows it for a certainty.

1440. Is it known as a certainty that mackerel do not breed on the English coast?—Quite certain.

1441. How is that with respect to herrings?—They will not breed here, they are passing fish likewise; the herrings are not drawn ashore, but a drift-net is spread in the sea, and when they swim through the water they get entangled in these nets, and are dead the moment they are out of the water. You can legislate for nothing but the trawl fishing.

1442. When you talk of legislating for the fish, you mean as regards the breed of fish?—Not for mackerel or herring.

1443. I apprehend we could keep French boats from coming within a certain reach?—That is all stuff and nonsense. If you protect the old breed of fish, all the French boats and Dutch boats and Spanish boats can do no harm, and would produce no sort of effect at all; only consider what a number of fish one produces.

1444. There is very little interference of the French on your coast?—I never heard of them at all.

1445. You are now speaking from your experience of the coast of which you are conversant?—That is only as to my neighbourhood. When I said you could not legislate for mackerel or herring, I meant only with reference to the interference with the breed, because they do not breed on our coast.

1446. During what season is it that the fish which breed on our shore should be undisturbed?—All the winter, November, December, January and February.

1447. In your opinion they should not trawl during those months?—I should think so; and those supposed to be the breeding-grounds ought not to be disturbed.

1448. In the latter part of these four months I suppose the fish are grown to a certain size?—Yes.

1449. After this do they gradually go from the coast into deep water?—It is generally supposed that all fish retire into deep water as they get larger.

1450. In order to protect young fish till they become of proper size, is it also your opinion that during a certain time there should be restrictions as to the distance from the shore?—The distance fixed by law is four miles and a half, that I suppose to be the proper distance.

1451. Will you give the Committee your opinion what restrictions would be advisable, and what is the proper distance from the shore?—My opinion is, that

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fish ought not to be taken at the time I have mentioned, nor within the distance stated by the Act, four miles and a half, and the mesh of the net ought to be the size stated by the Act.

1452. Are you aware of any bill of the kind having been introduced by our Legislature?—I never saw it till yesterday.

1453. In point of fact, I understand you to say, that the regulations of this Act of Parliament are wholly disregarded?—Entirely so, as if there were no such Act.

1454. Do you imagine that that is occasioned by the difficulty of putting this law in force?—I suppose so.

1455. In your opinion, would it be of advantage to leave the regulations of the seines to any local conservators or magistrates?—I should think the better way is to fix it by Act of Parliament.

1456. In your opinion, will one port be applicable to the whole line of coast?—I should think so.

1457. You do not know any sufficient reason for making a distinction, or vesting a discretion in officers on the coast?—I should not do that.

1458. The inquiry into that might, in your judgment, be judiciously left to persons on the spot, either to complain before the magistrate, or anything else of the kind?—My notion is, that it should be stated by Act of Parliament, and that the magistrate should enforce the Act.

1459. Is there any legislative protection required for the nets and other property taken in pots or nets of the fishermen at sea?—I know nothing about that: that refers to the crustaceous fish.

1460. Is there anything else you would suggest to the Committee with reference to the protection of the fish?—No; it appears to me to lie in a small compass.

1461. Can you state to the Committee whether the fishermen on your line of coast are at present in a thriving or in a depressed state?—I apprehend they are in a depressed state.

1462. To what causes do you ascribe that principally?—I have always understood, and have been told and believe that it proceeds entirely from the scarcity of fish, arising from the causes I have mentioned.

1463. Do they follow their pursuits with much less profit than formerly?—The trade cannot be so profitable where there are less fish caught.

1464. What is the principal market for fish on your coast?—The principal market is Bath.

1465. Is there a considerable portion of the lower class of people in that neighbourhood supported by fishing?—I believe there are a great many.

1466. Generally speaking, are they in a pauperized state?—As far as my observation goes, the poorer sort of people are in a very impoverished state.

1467. Do you know how they employ themselves at other periods of the year?—I believe they go to work as labourers.

1468. Some go out in merchant vessels, I suppose?—Yes.

1469. In your opinion, if the regulations you have alluded to are introduced, are you of opinion we should have fish plentiful on our coast?—I have not a doubt of it.

1470. Within what period of time?—I cannot tell how long fish are coming to their full size; there is a difference of opinion about that.

1471. Can you suggest anything which in your judgment would improve the carriage of fish; is there any facility of inland communication which would be desirable?—I do not know what other methods can be adopted than are pursued at present.

1472. Does the evidence which you have offered apply to your own coast only?—I know nothing about any other coast but Devonshire; the statute of Charles 2. only applies to the coast of Devon and Cornwall; I know nothing more than what has happened just in our immediate neighbourhood.

1473. Do the fishermen on your coast fish at all seasons?—I believe whenever wind and weather will permit: in the winter months they are generally laid up; then they fish in the bays and creeks, and do the most mischief.

1474. Supposing that was forbid, how could they support themselves?—They would catch 100 where they now catch one.

1475. In your opinion, it would be for their benefit if they did not fish at that period?—Yes.

1476. Do you know that on one occasion the trawlers did by mutual consent abstain for one or two seasons?—I was not aware of that.

1477. Do you know if it has been the practice with your trawlers to take any precautions against the meshes drawing together; do they, by an arrangement of ropes, prevent the net from drawing to its full length?—I never heard that mentioned before I heard it mentioned in this room; the mesh of our net is very small indeed. I know several persons among them; Mr. Paddon, Mr. Stevens, Mr. Austen and others, who would confirm the evidence I have given.

1478. Do they agree with you in your opinions?—Certainly, I believe they do.

Mr. *Francis Tapley*, called in; and Examined.

1479. YOU are a Fish Salesman?—Yes.

1480. Where do you carry on your business?—At Billingsgate.

1481. Do you carry on a large trade in fish?—Yes, principally with the Kentish people.

1482. Your habit is to buy fish and supply the London fish-factor?—No; my business lies entirely with selling it wholesale; it is consigned to me, as an agent for the country persons: there are nearly 40 sail of vessels that I do business for, who are principally employed in catching it themselves.

1483. Do you likewise buy fish out of boats that buy it from others?—No; most of my business is wholesale, from consignment; many parties that I do business for are purchasers in the country, and some of them are catchers, the principal part.

1484. But there are middle-men between the fishermen and those who send their consignments to you?—Yes.

1485. Is the London market much supplied with foreign fish?—Not to a great extent, unless as to lobsters, which are principally foreign.

1486. Can you at all give us any idea what proportion of foreign fish comes into the London market, of any fish except turbot, lobsters and eels?—I should consider not a great proportion, there may be a small proportion of mackerel; we do hear that there is a proportion of that foreign, and likewise fresh herrings in a much larger proportion than mackerel. From what I have heard from parties, I think at present there are eight or nine large French boats fishing within our own boundaries of coast, and most of their fish, if not the whole of it, comes to the London market.

1487. Do you mean vessels of from 20 to 30 tons?—Larger than that, from 40 to 60.

1488. I suppose you know that that is illegal?—I have heard that it is so.

1489. Have you ever known an instance of a prosecution and conviction taking place for that offence?—I cannot say that I have heard of any conviction: it is a great complaint, and has been for years; fishermen are, generally speaking, an honest set of persons, and do not like to complain of one another, unless it is necessary; but they have not a living for their families, and cannot pay the net-makers for their nets in consequence of the competition with foreigners; they are selling and sending to the same market as they do, and always fishing on the same ground; they frequently take a preferable berth, which our fishermen would choose, provided they were not there.

1490. You have heard these complaints frequently from the fishermen?—I have heard that many of the French are fishing within the North Foreland light, which is to be seen from Ramsgate Pier on an evening, what is called the Gull Stream light.

1491. Do you think the preventing foreign fishing would interfere with the supply of the London market?—I consider that the supply would be better by encouraging our own fishermen to a greater extent.

1492. You think that it would be beneficial on the whole?—To the fishermen on the whole, and likewise to the public generally. I consider that there is quite a sufficiency of English fishermen to supply the London market with everything that is wanted. Occasionally, the fish do not swim to a great extent, and they are not to be caught. Some nights a boat may catch 2,000 or 3,000 mackerel, and another may not catch more than 100. One vessel was up yesterday, which took 5,000 out of one boat, and a boat of nearly the same size, about a mile and a half further out at sea, had only 100 or 150. It is quite an uncertain thing fishing, generally speaking.

 1493. Is

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1493. Is it the French or the Dutch that interfere with us most?—Mostly the French on our coast.

1494. In the catch of what fish?—Herring and mackerel, and also turbot, brill, soles, and fish of that sort; they come into our very bays.

1495. Is not a large proportion of our supply of turbot from the Dutch?—No; mostly from our own people.

1496. Do not the Dutch supply more turbot than any other fish?—Eels, I consider are the principal fish.

1497. Fresh-water eels?—Yes; they come into the Thames with them, and where we have one vessel with English eels, there are 10 with Dutch eels.

1498. Where are they caught, do you know?—I cannot say exactly.

1499. On the Dutch coast?—I believe so.

1500. You do not mean salt-water fish?—Fresh-water eels.

1501. Is it your decided opinion that the supply would not be injured by the prevention of foreign fish coming here?—I do not consider that it would; I consider the supply would be equally the same. The difference would be, the channel that it passed through would be English hands instead of foreign. At this time of the year, from May or the latter end of April, they begin what they call the Dutch turbot season, and vessels coming up with them come to Gravesend and lay there perhaps a month or two longer; then they cease for some time, and we do not have them above three or four months in the year; our vessels frequently go fishing on the Dutch coast in the winter time.

1502. In your opinion, could our own fishermen supply a sufficient quantity of turbot to the London market?—I am of opinion that they can, considering the quantity of vessels at present employed in the service.

1503. You are aware that turbot come to the English market free?—Yes, I am; I have had some French turbot to-day to sell myself.

1504. How did you know they were French?—They are caught with a hook mostly, the French turbot.

1505. Do not the Dover people catch turbot with a hook?—No, mostly with a net. I have about 30 sail of vessels at Dover, that I do business for.

1506. Are there not a great number of boats that leave the river to collect fish among the vessels that are off the Foreland?—Yes, a good many hatch-boats.

1507. What sort of men are they that belong to them?—We consider them mostly a set of boisterous, blustering men.

1508. Generally, they are violent men?—Generally, violent men; so we consider them.

1509. Are the hatch-boats numerous or not?—There are a great many of them; they are mostly employed in bringing fish from Gravesend to London for the smacks. Many smacks make Gravesend their port, and do not come any further up.

1510. I suppose they sometimes go down the river to vessels out at sea?—In winter time they are principally employed in bringing fish from Gravesend to London, for the smacks; during the herring and mackerel season, each of which takes six or eight weeks in the year, they go on other voyages.

1511. Are there not instances of boats being detained at Gravesend, and not allowed to come up, in consequence of the large supply of fish in the London market?—There is a time allowed. As soon as they come without the Nore, there is an officer who takes an account of the time when they arrive, and they are allowed so many days to send the fish to town, or London would be supplied with a great quantity one day and none for a week. I do not think London has any fault to find as to the supply of fish; but at various times in the winter it is not at all a remunerating price for the fishermen.

1512. Is the price generally, in your opinion, a remunerating price to the catcher now?—The fact is, the interests are so very various, that we cannot say; some are more fortunate than others; one man may be within hail of his neighbour, and probably not catch one-fourth of the fish that the other may have.

1513. Do you know that the fishing trade is or is not distressed very much just now?—I should think very much so indeed; I should suppose that there are not two-thirds of the vessels that are paying their way.

1514. Do you think that the opening of Hungerford market will add to the general supply of the metropolis?—I do not; I consider that the expense of the parties there will be quite equal to any town fishmonger, and I do not think that they could supply cheaper than any other shopkeeper in London.

1515. There

1515. There must be a considerable expense in moving the fish from Billingsgate to other parts of London?—So there will be now; it will only be occasionally that they will be able to get up by water.

1516. When you speak of the distressed state of the fishery at this time, could you form anything like a per-centage calculation of what the fall in the price of fish has been in the course of the last six years?—It varies from day to day throughout the year; there are scarcely any two days in the year that our sales are alike for the same description of fish.

1517. I am speaking of the average declension; take the seasons generally, in what proportion do you think the fall may be estimated in the course of the last six years; is it 30, 40, or 50 per cent.?—With respect to the article of cod-fish, for these last two years, in consequence of their being caught so much nearer our own shores, they have fallen full 50 per cent.

1518. What do you attribute that to?—In consequence of their being caught so much nearer own own shores. Formerly a vessel, to take cod, used to be obliged to go to the Orkney Islands or the Dogger Bank, but for the last two or three years, the fish have been taken between Yarmouth and London.

1519. And that did not use to be the case?—No.

1520. With reference to any other species of fish, turbot for instance, how would turbot on a general average stand in the course of the last six years?—I should not consider that turbot have varied to that extent, not above 20 per cent.

1521. Has the supply of turbot been greater or less in the course of the last six years, or has it been pretty even?—I should rather consider that it was a little less, in consequence of the catch not having been so great.

1522. If the demand continues the same, the fall in the price ought rather to improve it?—Provided there had been the supply there had been for some years; the demand has rather improved, in consequence of the population of London being greater. In the article of mackerel, this season they have rather increased 50 per cent.; from May to the present time, the price of mackerel has been 50 per cent. higher than at the same period last year.

1523. To what do you attribute that?—To the scarcity of the May season; but from March to May the supply was rather greater; consequently, the prices were lower in proportion by 50 per cent. on the other hand.

1524. Take the general average of fish, turbot for instance; I understand that there has been a declension of 20 per cent. for the last six years, but that the demand you think is rather better; consequently, if the fall is 20 per cent. with the better demand, was it not for that better demand the fall would be greater?—If the supply would admit of it; if the supply was less the prices would be higher.

1525. There would be a 20 per cent. abatement upon the higher prices?—There has been a greater supply on the whole for the last six years, in consequence of an increase of vessels, although the supply from each vessel is less, but meeting all at one spot it makes the supply large occasionally.

1526. I believe the question was put to you whether in the event of the French and Dutch being prevented from supplying turbot, our fishermen could supply the market very adequately; would there be no declension in price, independent of any inconvenience?—I do not consider the price would vary; instead of coming in French bottoms, the same description of fish would come in English bottoms. Before the Dutch used to come themselves our own vessels used to purchase from them, and bring them to market; the Barking people particularly.

1527. Supposing any alteration should take place in the law, for the purpose of preventing the buying of fish out of foreign bottoms, would you suggest that that should be confined to within a certain distance of our own coast, or would you prevent them altogether from purchasing on the Dutch and French coast?—I do not see that would be a benefit to the fishermen in the least, as provided the article was generally purchased of them they would come here just as they do now, to oppose us.

1528. The fishermen say that it would benefit them if our people were prevented buying from the French and Dutch boats close in our own shore, as they now do; I believe you agree in that opinion?—I believe that is only as regards mackerel and herrings.

1529. Do you agree with the fishermen that it would be advantageous to them to prevent the purchase of mackerel and herrings out of French and Dutch boats?—Decidedly so.

1530. Would you have that limited to a purchase within a certain distance of our

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our shore, or do you think it would be desirable still to allow the purchase from the foreigners in their own ports?—Under no circumstance.

1531. You would prohibit it altogether?—Altogether; it must be done one way or other.

1532. Now, with respect to other kinds of fish, do you know if the French sell to our people other kinds of fish besides mackerel and herrings?—Turbot, I am aware they do, that is allowed by law; they occasionally purchase of our fishermen a particular description of fish during the Lent season.

1533. Supposing a duty was imposed upon the importation of turbot, of course you would have the purchase out of the foreigners prevented as well in respect to turbot as to mackerel and herrings, would you not?—The fishermen would benefit from it, certainly.

1534. Would it be wise to let our people purchase turbot of the French on their own coast; for instance, to go to the Dutch coast for turbot that are caught on the Dutch shore, or would it be better to allow no turbot to be imported but what are caught by our own fishermen?—It depends so much on whether our fishermen would be able to get their turbot within our own boundaries, because at times the fish shift and you cannot get at them.

1535. Would it increase the price of the London markets?—I cannot say as to the price, as the fishermen would be able to supply us, for the fish shift so much about.

1536. Would not the fishermen shift too?—They would shift with them; they would find them no doubt any where.

1537. Is it not the fact that these carrier or hatch-boats give rather more to the English catchers than they do to the French?—Mostly so.

1538. Do you know at all the sorts of the difference of price between the two?—Occasionally they give more; but it depends entirely on circumstances.

1539. But there is a decided preference on the part of the purchaser to get their fish out of English bottoms?—Decidedly so.

1540. Do you think that they suppose that they run any risk in purchasing out of French bottoms?—They consider so; if they see a revenue vessel handy, they keep at a distance from them in consequence of not liking to board the vessel in her presence, knowing that they are acting against the law.

1541. Have you any reason to suppose that if a duty was laid upon the fish which are now legally imported, that it would be still carried on in the way they sell other fish, and that instead of paying the duty they would transfer it to an English boat at sea?—I do not see that that would happen.

1542. Is there any fish allowed to be imported on payment of duty, and if so, what?—Sturgeons are.

1543. What other fish?—I cannot say that I am acquainted with any other particular fish.

1544. Are you aware to what extent the London market is supplied by land-carriage, to any material extent or only trifling?—To a very great extent.

1545. From what parts of the coast?—From the Kentish coast in particular.

1546. At all from the Essex coast?—Yes.

1547. From the Norfolk coast?—Yes, at this season of the year.

1548. Can you give me any calculation as to the proportion by the supply of land-carriage over water-carriage?—The water-carriage is three to one or five to one beyond the land-carriage in quantity and weight.

1549. That depends very much on the weather, does it not?—No; it is on the general average.

1550. Is the expense of land-carriage at present so great that it takes up the profit of the fishermen?—Decidedly so.

1551. It absorbs the whole profit, you think?—Not exactly the whole; a proportion, according to the article.

1552. Is it more expensive than the water-carriage?—Decidedly so.

1553. In your opinion would it be any material relief to the trade if the turnpike tolls were taken off the land-carriage of fish?—It certainly would be a relief, but not very material.

1554. Would it tend, in your judgment, to give a larger supply of fish inland?—I do not consider that it would to any considerable extent; it might perhaps by taking the turnpike tolls off bring it at a little less price.

1555. Are you aware what proportion of the expense the tolls form?—I cannot say that I am.

1556. What

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1556. What is the value of a cart-load of fish, at a fair value?—I occasionally have vans from Portsmouth, which is 72 miles, and for that I pay 4 *l.* 17 *s.* 6 *d.*; they have reduced it this year to 4 *l.* 4 *s.*; it contains 11 baskets; occasionally they bring a load and a half, for which we pay 6 *l.* 6 *s.*

1557. What would you consider the value of a cart of fish with two horses?—Most on the Dover-road have four horses.

1558. With regard to Hastings, you are in the habit of receiving carts of fish from thence, are you not?—Yes.

1559. Can you speak to the average value of one of Mr. Breach's two or four-horse loads of fish?—I should consider the value of a Hastings' cart of mackerel to be from 20 *l.* to 30 *l.*

1560. Would that be a two or a four-horse load?—That would be a two-horse load.

1561. Can you tell us what is the amount of the land-carriage under the present circumstances, including turnpikes?—I am not in the habit of paying the whole of the rate through.

1562. Can you form any idea of the proportion in which the London market is supplied from the coast of Devon or Cornwall?—A very small proportion.

1563. To what amount?—In the winter time the vessels from Cornwall, to the amount of 50 or 60 sail, come to Ramsgate to go into the North Sea; the supply of fish from Cornwall is but small, they send mostly to Bristol and Bath.

1564. Does not some come by way of Portsmouth to London?—A few, during the mackerel season.

1565. Do you know instances of steam-vessels being employed in bringing fish up?—I know there have been occasional instances.

1566. Does not that tend to increase the water-carriage very much and decrease the land-carriage?—It would be difficult to get a steam vessel round from Hastings as quick as you could come by land, and there would be a loss occasioned by it.

1567. The steam vessel could not undersell the land-carriage?—Not from that distance; the expense of a steam vessel is so great that they could not bring them to market so cheap as they now come.

1568. Would they not from Dover?—Provided a vessel could be always started at one time, but the vessels are not always in at one time. We are in the habit of receiving fish by Dover night-coaches, when there is not a sufficiency to load a van with; the proprietors of the vans horse these coaches, and but for that it would not pay a person to put horses on the road for that special purpose.

1569. You spoke of vessels stopping at Gravesend; can you inform me whether the vessels that stop there are entered at the London Custom-house?—All of them; they stop there in consequence of the water being of that nature to keep the fish alive; if they were to come higher up it would kill them.

1570. We have heard a great deal of the monopoly of the London market?—It is quite a mistaken notion on the part of the public.

1571. Can you suggest to this Committee any alteration in the law, or anything that occurs to you, in order to improve it to the consumer in the London market?—Not in the least; there is every expedition that can possibly be managed; they are always endeavouring to outdo one another. Sometimes a man will put himself to 8 *l.* or 10 *l.* expense for that purpose, and they have gone to every expense to get the fastest sailing vessels that they can, and by a man saving one hour at Billingsgate market he may sometimes gain from 20 *l.* to 30 *l.*

1572. In your opinion, there is no alteration required?—I do not think there can be anything done to benefit the trade in the least respect.

1573. Is there a free competition in every respect?—Yes; even yourselves, if you wished for a turbot, or a pair of soles, have the same privilege of coming to Billingsgate market as any fishmonger in London.

1574. Will you tell me from whence the London market is principally supplied with oysters?—It is supplied from Kent, Essex, and those places.

1575. Are these oysters taken in the Medway or on the coast?—They are at first taken over at Guernsey and Jersey; but our native breed is taken on the Essex coast.

1576. Then where is the London market principally supplied from with oysters?—By speculating men, who first of all purchase the breed and lay it down to grow, the same as a farmer sows his land.

1577. Where are the oysters brought from, from the sea-shore or from the rivers?—Mostly from the rivers.

1578. Is

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1578. Is there any considerable supply of the oyster taken in its full growth on the south coast of England?—They are less strong until they are laid on these grounds.

1579. Are you not aware that vessels go from the river every year as far as the Land's End, to collect oysters from the different rivers and bring them here and lay them on the beds?—I am perfectly aware of that, they go as far as Brest.

1580. Are any of your London dealers whole or part-owners of the fishing boats on the coast?—Very few of us. I hold one, and I have so good an opinion of them, that I would not hold it if I was not obliged.

1581. Then those who are part-owners have a control over the fishermen on board?—Mostly so; they have two or three boys of their own that they put in. Most of the people that I do business with for turbot are men who go to sea, and provided they get no fish they have no pay.

1582. Who finds them with their board?—They find themselves; one vessel of 40 tons will make eight shares; the men take five and the vessel three.

1583. Can you suggest to the Committee any alteration which you think would benefit the fishing interest?—By giving them their boundaries secure would be of very great benefit to them, and keeping foreigners from tearing their grounds up. They could go into the North Sea, but they could not get their fish fresh to London; the French occupy so much of the ground, that they are driven to be idle when otherwise they would be fishing.

1584. In your opinion, that would be the principal mode of relieving our fishermen?—I should consider that was the principal.

1585. Are you aware of the general complaint of the scarcity of fish on the English coast?—There has been a scarcity of late years: for instance, the mackerel this year have set in the land 40 miles nearer than they have done for the last eight or ten years; there is no accounting for that.

1586. Do you know whether these fish breed in our Channel or in the Northern Seas, or where?—We cannot determine as to that; as to soles, we apprehend they breed a great deal on our own shores.

1587. Is there anything else you would suggest for the benefit of the fishermen; is the supply of the London market adequate to the demand for fish, supposing the prices were lower?—There is nothing that would make the prices lower; at times we are particularly low, at other times we are particularly high. The prices are ruled by the supply and demand.

1588. Does the supply of fish fluctuate very much from day to day?—As much as cent. per cent. from day to day.

1589. There being at times a glut in the market, and at other times not a sufficiency?—Yes; and as to altering the thing, I do not see a possibility of doing it. If there are six fishmongers come round me, and each of them want a turbot, and I have only three to supply them with, neither of them likes to disappoint a customer, and the fish is sold to the highest bidder; if one man bids a guinea, and another 25*s.*, the 25 *s.* customer has the preference.

1590. I understood you to say that you had only one share in a boat; do you mean, generally speaking, that the boats do not belong to people residing in London?—A very small proportion, if any, of the fishing boats. I should consider that I am the only salesman who does business for the Dover people, that holds ony part of a fishing vessel.

1591. The fishermen on the coast of Devon are not obliged to send their fish to the London market more than any other?—They may send to any market they please; I should not consider that any of the Devon vessels have a London owner in any shape.

1592. You do not think the practice prevails at all?—I do not; I do not think that there is any London owner that has an interest in a fishing vessel but would be happy to get rid of it to-morrow if he could.

1593. You say that at times of the year the market is glutted; has that any effect on the retail price of fish generally?—I am sure I cannot say as to that; that depends entirely on the person's business; there are times when there is no question that the fishmonger serves the public at a loss.

1594. You say that at certain seasons the market is glutted; I ask you, during that season of the year, do you, as a fishmonger, find that the retail price of fish is considerably lower?—We cannot speak of any particular season; I am speaking from day to day. We are supplied with 100,000 mackerel to-day, to-morrow we may

Mr. *Francis Tapley.*

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may not possibly have 5,000, in consequence of which the prices vary; as to any regulated supply there never can be one as to fish.

1595. Is it true that it is a habit to destroy a large quantity of fish in the London market?—Not any that can possibly be sold.

1596. Then it is not true that there is a considerable destruction of fish in order to keep up the price?—I would explain it in this way: you and I have 100*l.* worth of the same fish going to market; I have my own expenses to pay, and you have your expenses to pay; my fish are not sold, but I do not share in any portion of your 100*l.* to pay my expenses.

1597. You say the competition is such that, in point of fact, it could not exist?—I do not suppose that sixpenny worth of fish is thrown away by anybody which possibly can be sold; I have heard that several persons imagine that it exists, but it is not the case. It has been always considered that the fish trade is a monopoly, and has been for years, but a more open trade there is not carried on in London.

1598. The vessels with the fish do not all come in at the beginning of the market; do not some come in in the course of the day, as the market goes on?—They all come in as fast as they can; a vessel may arive at five o'clock in the morning, with a cargo of 10,000 mackarel, which would average from 48*s.* to 50*s.* per hundred; if that 10,000 arrived at 10 o'clock in the day they would not fetch at more than from 32*s.* to 36*s.*, and if they arrived in the afternoon with 10,000 others at the back of them, they would not fetch at from more than 24*s.* to 28*s.*

1599. Is that an invariable result, or is it not governed from the previous quantity of fish in the market?—If there are 10 vessels from Margate for the London market, the whole of these 10 get to London as quick as they can, and carry every press of sail to outdo one another; there is no delay occasioned; if one gets into the river and he can employ a steam-boat, he will give 20*l.* to tow him up, in order to get to the market before his neighbours, when he gets a better price for his fish.

1600. Does it ever happen that it is worth the parties' while to keep his fish until the next morning?—At this time of the year, 10,000 mackerel, which might be worth 200*l.* this morning, if kept till to-morrow would not be worth 15*s.* a hundred.

1601. Supposing that 10,000 came late in the day, when the greater part of the fishmongers were supplied, what would become of the 10,000 if the demand fell so much that there was no market at all?—It would then pass into the hands of the lower orders.

1602. By its passing into circulation amongst the lower orders, who could not otherwise afford to buy it, there is no destruction of the fish?—Not a farthing's-worth: the vessels are sold at the highest price that can be obtained for them.

1603. Is the whole cargo of a vessel generally consigned to one person or to many?—If it is consigned to me I act the part of a salesman. I have had occasionally from Mr. Breach as many as 25,000 mackarel, and I have sold them in various lots from 120 down to 15; that is the lowest wholesale property that we dispose of.

1604. If two vessels be fishing together, and have caught an equal quantity, and sent them to the London market, one may sell early, and the other, anticipating an advance, keeps the fish back?—There is not any kept back with a view of getting a better price; there is as much expedition used as possibly can be had; sometimes we put six horses on a conveyance, that no delay may be occasioned. A man by sometimes getting too soon gets a worse price than the person who comes after him.

1605. I have been told that two fishermen from Harwich have sent up the same cargo of fish, and one has had back only one-half of the money received by the other?—That entirely depends on the quality of the customers; some will give a better price than others. The same description of fish will vary as much as cent. per cent. within three hours.

1606. Is not the London market chiefly supplied by contract?—No.

1607. Do you mean that the fisherman does not know what price he is to get until his fish goes into market?—No, and the salesman does not know what price he is to get till it is sold; no one knows the value of the fish until it is sold, even the seller. When a fishmonger buys a fish of me he cannot say what he will obtain for it until it is sold; sometimes it perishes on his hands, and then it is total loss.

Mr. *James Ebenezer Saunders*, called in; and Examined.

Mr. *J. E. Saunders.*

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1608. YOU are a Fish-factor, I believe?—I am.

1609. Residing in Lower Thames-street?—Yes.

1610. Your business is principally carried on at Billingsgate market?—It is.

1611. In what branch of the fishery is it particularly?—Principally in the North Sea fishery; the cod fishery.

1612. And partly to the turbot fishery?—A good deal to the turbot fishery, but more to the cod.

1613. And also to the lobster fishery, at this season of the year?—To a very considerable extent.

1614. Your house, with your father and grandfather before you, has been established for these hundred years, I believe?—Yes.

1615. And you are fully qualified to give the Committee all information as to the rise, progress and declension of the North Sea fishery?—Yes.

1616. Particularly as regards the port of Harwich, with which you have been connected?—Yes.

1617. You probably can inform the Committee at what period the greatest number of fishing smacks were at Harwich?—In 1774 there were 62 vessels, and in 1778 there were 78, of from 45 to 55 tons burthen.

1618. As near as you can say, whereabouts is the present number?—I think not above 10, and three of those are now for sale; I do not think there are more than seven.

1619. To what do you attribute so material a declension in the trade?—A variety of causes have produced that declension.

1620. Do the Dutch interfere at all with our fishery?—No; there were a great many of the vessels captured during the war; and at the close of the French war, which I think was in 1815, the fishermen at Harwich, principally at my instigation, attempted to prosecute the turbot fishery, which we did for four years; but though the Dutch got supplied for their cod fishery, and had done for more than 100 years, with lampreys, free of any duty ——

1621. Lampreys are got for cod, are they not?—Yes; and smelts are bait for turbot. The Dutch impose a duty on their smelts of 8 *l.* per barrel.

1622. What would be the price per barrel, exclusive of duty?—About 40 *s.*

1623. Has the diminution of the cod fishery principally arisen from a transfer of the cod fishery to other parts; is that one of the principal causes?—Certainly it is.

1624. Has there been a great declension in the price of cod?—A very great declension; the average produce of cod for some years had not been equal to the current expenditure of the vessel.

1625. Then it has been a losing trade to the Harwich people?—Very considerably.

1626. For some years it received the benefit of a tonnage bounty and a bounty on the fish; as long as that existed it was an aid to them, and when that was done away with, the declension progressed materially?—Yes, there is now 7,000 *l.* bounty due to them for five years' fishing: the British Fishery Board merely ceased the debentures on the tonnage bounty, and not on the fish cured; the debentures being withheld from the cod fishery has been a very serious injury to them.

1627. I believe the reason of their being refused these bounties arose from the regulations and restrictions which the Board at Edinburgh had laid on the state in which the fish were prepared, in a particular description of barrel; and those restrictions not having been complied with, the bounties were not paid, on the score of their not having complied with the letter of these instructions?—The first year they were withheld the bounty on the cured fish, they said it was because they were not fit for exportation; the next year they stated that some part of the fish was not put into the barrel; the third and fourth year they stated, that although the brand-mark on the barrel, which would cost 6 *s.* to the fisherman, and entitled the tradesman to 2 *s.* 6 *d.*, was there, still there was no necessity for it, and that they should insist on every fish being marked upon the tail; and every fish in consequence was marked upon the tail, and yet the bounty is withheld.

1628. Is that a Board at Edinburgh at the head of a private company, or under the control of Government?—It is under the control of Government.

1629. Although

1629. Although the bounty which is owing to the fishery is not more than 7,000 *l.*, yet the actual loss for the outfit of the vessels amounts to upwards of 50,000 *l.*, which you know from the accounts which have passed through your hands?—I do; for the five years the vessels were minus 50,000 *l.*

1630. I ask you whether I am correct in stating that the law which prohibits fish from being bought by strangers in foreign vessels is the 15 Chas. 2, c. 7, s. 16?—It was.

1631. What is your opinion, if the prohibition of importing fresh cod and turbot caught by foreigners was properly enforced; do you think that our smack owners could supply the market sufficiently without raising the price?—The market would be more abundantly supplied by it; the whole force of these legislative enactments was the fostering hand which led forward and protected and encouraged this important part of the community. There are five men and five apprentices on board each of these vessels, so that there has been constantly 1,000 lads kept in training and are at this moment for the sea service; and Earl St. Vincent said, that the 200 men he had from our fishery were the best men he had, and certainly the best North Sea pilots, for ten months out of the twelve they are constantly at sea.

1632. The diminution of seamen that must result to the service from so many men and boys being now withdrawn from employment must be a very serious evil?—If these acts, which we consider as our protection, were repealed, the owners of the smacks, who can now scarcely proceed to sea, must follow in the calamitous train of purchasing their fish from foreign catchers, and navigating their vessels by four hands instead of 10, and thus the nursery for seamen would be destroyed.

1633. What is the tonnage of your smacks?—They run up as high as 70 tons.

1634. Do you mean to say that the statutes now in force ought to be repealed, or not?—I beg to be understood to say that they should be enforced, to prevent anything like foreign-caught fish, brought by foreigners in foreign bottoms, being imported into this country.

1635. You mean to say that the statute of Charles, which prohibits fresh cod being sold, should stand good, but that the law which prohibits turbots from being sold should be repealed?—Certainly.

1636. Do you mean to say that all this fishing trade could not exist without those prohibitory Acts?—I am persuaded it would fall to pieces altogether.

1637. Prohibitory in what respects?—Prohibiting foreigners from bringing that fish.

1638. You think that without that protection the trade could not go on?—Unless we have the same protection as we have at the present moment.

1639. Supposing the foreign fish is kept out of the British market, surely our fishermen would be able to compete with the foreign fishermen?—Certainly.

1640. Then in what other respects would it be necessary to have prohibitory laws?—As regards the North Sea fishery; the prohibition of turbot would induce many of these vessels to embark in it again.

1641. Supposing all foreign fish, turbot, cod and herring, are prevented from being brought into our market, will that renovate our fishing trade?—It would greatly relieve them from their present incumbrance, and will probably bring them round.

1642. In your opinion, if foreign-caught fish was excluded, will the British fishermen be sufficiently able to supply the home market?—I am sure of it.

1643. You are convinced that the exclusion of foreign fish would not raise the price in our market?—I am.

1644. By encouraging our own fishery you think we should have it cheaper?—No doubt of it.

1645. You think that if the prohibition was still further enforced, that we should have other English vessels go to sea and supply us, in the same manner as we are now supplied by foreigners?—I am sure of it.

1646. Have you any knowledge of any vessels applying for a licence to go over to the Dutch coast, which have been refused, without any charge of smuggling, by the Custom-house officer, and if so, name them?—Yes; the Emma, Success, Friends, Good-will, Good Intent, Elizabeth, Thames, and Providence.

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1647. Do you know the name of the Custom-house officer who refused to licence the vessels?—Yes, Mr. Robilliard.

1648. Was there any reason assigned for refusing the licence?—We prayed in the usual course for a general licence to carry passengers and goods to Norway and Sweden, with which we have considerable intercourse; I have sold 20,000 lobsters of a morning from that coast.

1649. Were you refused the application?—Yes; and besides their objecting to take goods and passengers, they would only grant the licences for two years, whereas the others are as long as the ownership continues.

1650. Are other Harwich boats furnished with the same sort of licence refused to you, and for the same object?—Yes.

1651. What was the reason assigned for refusing the licence to the vessels you have named?—There was no other reason than Mr. Robilliard's will and pleasure. The owners of the Emma and Success have other vessels that are licensed, yet he would not grant them to these vessels.

1652. Did he assign any reason?—No reason whatever.

1653. Can you in your judgment assign any reason?—None, further than I believe that one of the owners gave him some offence.

1654. Did he assign a charge of smuggling against the vessel?—No; I have memorialized the Treasury upon it, and my memorial was referred to the Board of Customs, and the report which Mr. Robilliard made upon it led the Board into an error, and the consequence was that I was refused. In consequence of a letter that I wrote to Mr. Rice, an inquiry was instituted by the law officers of the Customs, and there I had an opportunity of seeing Mr. Robilliard's misrepresentations on the subject.

1655. Is the matter yet remedied?—No, it remains as it was.

1656. Is it still under investigation?—It was in September last that I wrote to Mr. Rice, and I have never had any communication with him since; I had a communication with the Board officers, who sent for me.

1657. When did they send for you?—Shortly after I wrote to Mr. Rice.

1658. You have not succeeded in getting your licences?—No, we have not; the owners of the vessels are still branded with the stigma of not being able to take goods or passengers.

1659. You saw the representation of the Custom-house officer to the Board?—Yes.

1660. Did he in that representation assign any reason?—He did not see any reason why Mr. Saunders should dictate to the Board. My letter, I humbly submit, was no kind of dictation, but merely praying that the parties might not be branded.

1661. Did he say there was any suspicion of smuggling?—He stated there would be a risk to the revenue; and in my representation to Mr. Rice, personally as well as by letter, I showed that there could not be a risk from these two vessels, while the whole bulk of the fishery, upwards of 200, were properly licensed.

1662. Are any fees expected to be paid for the licence?—Two guineas are paid to the Custom-house agent, including stamp and all expenses.

1663. Of what tonnage were these vessels?—Two of them were 70; two 60; and the other three about 50.

1664. Were they square-rigged vessels?—Two of them had been taken by the Government into the packet service, the Emma and the Success.

1665. Were they faster sailing vessels than the others which were licensed?—I do not know that they were; they have been taken by Government to convey the Gottenburgh mails to Harwich.

Mercurii, 26° die Junii, 1833.

JOHN P. PLUMPTRE, ESQUIRE, IN THE CHAIR.

Mr. *John Goldham*, called in; and Examined.

1666. WHAT is your situation?—I am Yeoman of the Waterside and Clerk of Billingsgate market.

1667. What do you consider to be your duties as clerk of Billingsgate market?—To attend to the regulation of the market and to the collection, and to see that there is no bad fish sold or exposed for sale.

1668. Can you give the Committee any information with respect to whether there is any monopoly in the fish trade, or whether Billingsgate is an entirely open market?—It is entirely open for any one; I do not think there is any monopoly existing there, if I did, I should feel it my duty to bring it to light.

1669. Any boat with any quantity of fish may come to market?—Any.

1670. Is it purchased before it comes up the river?—A great deal of the fish is purchased at sea before it comes to Billingsgate; but none this side of Margate that comes to the London market.

1671. Is there not a combination of individuals to purchase almost every boat load of fish before it comes to market?—No, but there is a certain description of fish that are bought at sea.

1672. What description are those?—Some of the mackerel, herrings and turbot, for instance. Formerly, our fishermen used to go and purchase the turbot of the Dutchmen at sea; but I believe, in consequence of our people giving them so small a sum for the turbot, they considered themselves justified in bringing them here themselves, and that was the case last year; but this year, I believe, they do not find it answer their purpose; and at this time our fishermen are in the habit of catching turbot themselves, as well as of buying them of the Dutchmen.

1673. Have the Dutchmen equal facilities for entering the market with the English dealer?—With turbot, eels and sturgeon; they are the only fish that they are allowed to bring.

1674. Do they come free of duty?—No, the eels pay a duty of about 13*l.* odd per cargo.

1675. What sized cargo?—I think the vessels, the cargoes of which average about 15,000 or 20,000 pounds weight, hold as much as 50 tons: there are two companies in Holland, which have five vessels each for eels, which supply the market, and they are in the habit of lying off Billingsgate constantly, and as one vessel lies there, another goes to Holland and supplies them. In fact, nine-tenths of the eels consumed in this country are Dutch; even Hampton and Richmond are supplied by eels from Holland.

1676. Is not the corporation by whom you are employed, universally opposed to monopoly?—Certainly.

1677. And if there were any charge of monopoly brought before them, would not that monopoly be done away with?—I am certain of it; and if I thought one existed any where, I should mention it to the Lord Mayor.

1678. Do you think the supply of the market is as regular as it can be?—Yes, though I am of opinion that the fishery is in a very bad state now.

1679. What reasons have you for thinking so?—From the expenses they are at, and the difficulty they have at times of catching fish, and its producing so small a price at Billingsgate.

1680. Do they catch and bring to market more fish than there is a demand for?—At times; all that depends upon the weather.

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1681. Is there a regular supply of fish kept up at Billingsgate?—When the weather will admit of it.

1682. Do the fishmongers arrange matters in such a way as to suit the supply to the demand?—If there is a glut of fish to-day, and consequently cheap, they have an opportunity of buying that fish and keeping it by them for a day or two, by having a quantity of ice by them, and the respectable fishmongers buy the fish of a better quality: there are three sorts of fish, the best, the middling, and the fish that is eatable for the day.

1683. Is Dutch fish brought into our market only in Dutch vessels?—No, almost entirely by our own vessels; I do not think I have had above two or three cargoes this year by Dutch vessels.

1684. What description of fish are you speaking of?—I am speaking of turbot and soles and Dutch plaice.

1685. Are soles brought from the Dutch vessels in English bottoms?—If it is so it is not legal, it is prohibited.

1686. Is the duty of 13*l.* a cargo upon eels, paid to the Exchequer or to the corporation of London?—It is paid at the Custom-house.

1687. Have you any charge upon entering the market which is payable to the corporation?—Yes.

1688. Is it the same to the foreigner as to the Englishman?—The Dutchman pays 1*s.* for a standing, and the other 6*d.*

1689. Do you think that foreign fish, that is prohibited by Act of Parliament, is brought into our market?—Yes, by purchase of the Englishman of the foreigner at sea.

1690. Have the herrings and mackerel come in largely from foreign vessels?—They are caught chiefly by our own people; those caught by foreigners are brought in by Englishmen.

1691. Can you give the Committee any idea of the proportion of foreign fish to English?—No.

1692. Do you know where the foreign fish is taken?—A great deal of it is taken off Dungeness.

1693. How happens it that our Englishmen do not take it?—The French fishermen are in the habit of coming and frequently encroaching upon our grounds.

1694. Is it the case that the earliest vessels in the market get the highest price?—If they come at the time that the market is open, because it is in a better state in general.

1695. Do you know the number of vessels that are coming up in a tide, and what the cargoes will be before they actually arrive?—Generally.

1696. At what hour in the morning is the current price for the day ascertained?—The market commences at five o'clock all the year round, and the fishmongers from the west end are in the habit of coming down at that time, and all the best fish comes into the market at the ringing of the bell at five o'clock, and the fishmongers from the west end give better prices for the better class of fish, and they get away at half-past six or seven o'clock with their fish.

1697. What will they pay for a good turbot?—It entirely depends upon the supply; one day a turbot will be 5*s.*, and another day the same sort of fish will be 1*l.*

1698. By whom are the purchases of fish made at Billingsgate?—By the fishmongers.

1699. Is the retail sale of fish carried on to any extent at Billingsgate?—The inferior sort of fish.

1700. To whom is the best sort of fish sold?—To the fishmongers almost entirely.

1701. Do you imagine that the fish bought by the fishmongers is all consumed?—I have no doubt that the fishmongers have fish at times that they cannot sell.

1702. Do you know what they do with it when it is spoiled?—I think there are fishmongers that may not be so respectable, that have been in the habit of selling it to the poor, but it is a thing that I have been endeavouring to prevent by seizing it.

1703. Supposing a fishmonger has purchased more fish than he can dispose of, do you know how he gets rid of it?—No.

1704. Do the lower classes of people in London readily purchase fish?—The lower class of people entertain the notion that fish is not substantial food enough for them, and they prefer meat; but at times, when mackerel and herrings become very cheap, they eat a great deal of them.

1705. Has

1705. Has the price obtained in the London market for fish been higher or lower than it was formerly?—I think it is considerably lower.

1706. On an average of years, do you consider the supply has increased or diminished?—It has increased.

1707. Do you consider that the lower price is from the increase of supply?—Yes.

1708. Does not it a good deal depend upon the price of meat?—Not exactly, but I think that when fish is very plentiful and cheap it reduces the price of meat.

1709. Is all the fish that comes up the river obliged to go to Billingsgate?—Not unless it is consigned there.

1710. Can they come as far as Westminster?—I think they can.

1711. Is there any toll imposed by the city upon a boat coming up the river past Billingsgate?—None, I believe, but upon the oysters.

1712. You have no reason to think that any boats laden with fish are unfairly kept back in the river?—Certainly not; if it was so, I am sure I should know of it. Perhaps the question alludes to the boats that come to Gravesend. The fishing smacks that catch the fish come to Gravesend and lie there, and they are allowed by Act of Parliament to be there eight days to get rid of their cargo, but I never knew them exceed that time, and they only remain there longer when it is cold weather; but it is to their interest to get to market as soon as they can, and the fish comes from Gravesend to Billingsgate in hatch-boats.

1713. Then the vessels that catch the fish do not bring it up further than Gravesend?—No, and then it comes from there in hatch-boats, which are built on purpose to bring them to Billingsgate.

1714. Can you state the difference between the price of the fish upon a full fish day in Billingsgate and at the west end of the town?—It is very great.

1715. Is it your opinion that the glut of any particular fish upon any given day is not occasionally prevented by keeping back some of the vessels laden with it?—I think not; being a perishable article, it is to their interest to get it to the market as soon as they can.

1716. You think it is never destroyed?—No; so far from the fish being destroyed, I have the greatest trouble possible to prevent bad fish being brought for sale.

1717. Might not it be kept in well-boats down the river?—Both cod and turbot are kept in wells or trunks in the fishing vessels which occasionally lie at Gravesend.

1718. What is the quantity of fish, one day with another, that is sold in the market?—It is impossible to state that at this moment, it varies so much.

1719. Is not a butt of fish all sold together, and averaged at so much a pound, at about 2½*d.* or 3*d.* per pound?—If you take all the fish that comes to Billingsgate market, it is probable that the average would be about 2½*d.*

1720. Are not the fish all sold together?—No; for instance, the Dutch plaice are sold in turns, which are about 45 in a lot; the soles are sold in bushels; the turbot are sold singly; the mackerel and herrings by the hundred; we have no fish sold in Billingsgate by the pound but salmon and eels.

1721. How many informations have you laid during the last year on account of the sale of fish in an improper state?—I have had a number of salesmen before the Lord Mayor.

1722. How many times do you think during the year?—I should think 20 times; I have made a point always, whenever salesmen have sold bad fish wilfully, to have them before the Lord Mayor; and if I find it is not wilfully but through some mistake, then I give them a caution. I am sorry to say that the Act of Parliament does not inflict any penalty, and when I go back I get laughed at for my trouble.

1723. What is the penalty and what are the means of enforcing it?—The Act of Parliament says, that the fish seized shall be burnt in the market; now that could not be done in the neighbourhood, it would be a nuisance; and then the only method is indictment at the sessions.

1724. Is there no fine?—No.

1725. What would you recommend?—I should recommend that a penalty should be levied for selling bad fish.

1726. What penalty would suffice to accomplish the object?—I should think 5*l.*, liable to some mitigation at the discretion of the magistrate, would do it, for every offence, and the second offence might be 10*l.*

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1727. Are the Committee to understand that the only penalty attaching to that practice is the loss of the property?—The loss of the property, to be burnt in the market, or by indictment in the city.

1728. Have the indictments at the sessions ever taken place?—I have never known but one, and I expect it now to come on immediately; it is put down for the 8th of next month.

1729. To what extent in any one instance have you destroyed property of that description?—I think last year to the amount of 160,000 fish of one sort or another; I have taken as much as 3,000 salmon from one salesman in a morning, averaging about 10 lbs. each fish.

1730. Were these salmon offered for sale?—No, they were not offered for sale, because they could not offer it for sale without my seeing it.

1731. Then, but for your eye over them, they would have been offered for sale?—They might; and formerly nearly all the bad fish used to be sold and eaten.

1732. Were they consigned for sale?—Yes; I should observe, that one of those cargoes of fish were Irish salmon; and it arose from bad management. Irish salmon is far superior to the Scotch in condition, but it was sent in very shallow boxes, and what little ice had been put in had left the fish entirely; not only that, but it came to Liverpool, and then by the Regent's Canal; and from the heat of the weather and length of the voyage, there was not any ice when it got to Billingsgate; and that was the occasion of the fish being bad.

1733. Then it was not an intentional fraud?—No; it was an accident, arising from want of management.

1734. Is there any law against a fishmonger keeping bad fish for sale?—I should think it is not sufficiently provided for.

1735. Is your supply of fish generally taken off in the day?—Yes; but sometimes it is late in the day, when we have a glut.

1736. What is done then?—It is sold at any price then to the lower classes.

1737. Not to the fishmongers?—No.

1738. Do you think if there was a much larger supply of fish, it would be taken off?—I doubt it.

1739. What is the business of the salesman?—They sell the fish for the fishermen, and have a commission for the sale of it.

1740. Are the Committee to understand that the average of the present supply is quite adequate to the demand?—In general, I think it is.

1741. Is the fish generally placed in the hands of the salesman to dispose of?—Some of the owners sell their own fish.

1742. To whom do they sell?—To the fishmongers and others.

1743. Do the west end fishmongers generally contract for the cargoes?—No; our market-bell rings at five o'clock in the morning, and every fish that comes into the market is exposed in the open market for sale.

1744. Does your occupation last throughout the day at the market?—I have been there 18 hours out of the 24; I sleep there every night; I generally know of a considerable part of the fish that is there for the morning before I go to bed. I beg leave to mention another thing to the Committee, which is taking place at this time: the sale of oysters stops upon the 12th of May and commences on the 5th of August, allowing three months for the oysters to breed, and during that time they are very unwholesome to eat. Lately we have had several people in the river with oysters, some of which have been stolen, and they are in the habit of selling them at Gravesend, Chatham, &c. &c., and they are being spread about the town now, petermen and other people buying them at 5 *s.* and selling them at 12 *s.*, to the injury, I consider, of the health of the public, and of the fisheries as well. The Lord Mayor has permitted me to have some bills printed, offering a reward; and I have had one person before the magistrates, who has been fined; but we find that the Act of Parliament will not inflict any penalty on those that are not under the Lord Mayor's jurisdiction. The law is, that I, as yeoman of the waterside, which is the office of principal oyster-meter, with a constable, can make a seizure within the Lord Mayor's jurisdiction, and take them before a magistrate, and the fine is 20 *s.*; but the magistrates at Rochester and at Milton are inclined to think that they cannot act upon that Act of Parliament, and so the nuisance is going on now out of the Lord Mayor's jurisdiction. They contend that they cannot act upon it, because it is a local Act.

1745. Are the oysters now in the course of coming up?—Yes, they are.

1746. Where

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1746. Where do they come from?—Some are taken from the beds, I think stolen, and others are caught in the sea, and then laid and taken up again, but at this time they are all unwholesome food.

1747. Do they come from the Milton grounds?—I am inclined to think that there are some stolen from those grounds.

1748. Do the parties engaged in the dispute respecting the grounds bring them up?—No.

1749. Do you know whether the oysters you speak of are caught in the Channel?—Some few of them.

1750. At an improper season?—I consider all oysters out of season at this time.

1751. Is it not common at this moment to sell oysters at the orange stalls?—It is not common.

1752. What remedies exist for suppressing that practice?—None; but I consider if it were prohibited, except those purchased for supplying the oyster-beds, it would be a great benefit to the oyster companies, and would protect the health of the public.

1753. In what respects are oysters unwholesome at this time?—At this time of breeding they are full of spawn, and they become very sickly and unwholesome.

1754. Is there much fish comes up by land?—A good deal, particularly from Dover, Yarmouth, Hastings and Brighton.

1755. Can you state any relief that can be given to the parties conveying fish by land to Billingsgate, that would materially relieve the fishermen upon the coast?—No, I cannot. I have frequently known a pot of soles come to Billingsgate market that has sold for 3 *s.*, and the carriage has been 4 *s.*, it is so heavy.

1756. Are there any local duties upon boats brought to Billingsgate wharf?—Each hatch-boat pays 1 *s.*, and probably it will bring 50 or 60 bushels of fish, and that 1 *s.* is for the use of the planks and the ladders and a dumb lighter to land the fish, and for lights; larger vessels pay 2 *s.* 3 *d.*

1757. Do the fish that come by land-carriage pay any duty to the market?—They used to pay a halfpenny a pad, which is a basket like a wine hamper, but now they pay hardly anything; fish vans pay 1 *s.* each; the dues are uncommonly moderate at Billingsgate.

1758. Are the dues greater or less at Hungerford than at Billingsgate?—They are much heavier at Hungerford market.

1759. Does not that operate prejudically to the west end of the town?—I think it may.

1760. Do the English fishermen complain of the introduction of foreign fish; of eels and turbots?—Yes, they do sometimes.

1761. Does it ever occasion disturbance in the market?—Not in the market; we have no foreigners in the market except three or four Dutchmen, who sell eels; there is one Englishman objects to them occasionally, that comes with eels, but I do not think we could get a constant supply without those Dutch eels. There is a great quantity of fish bought of the foreigners at sea and brought to the market by English carriers.

1762. Do the fishmongers generally attend themselves at the market in the morning, or do they transact it through agency?—The fishmongers attend themselves or by their servants; they never do it by agency.

Mr. *Michael Myers*, called in; and Examined.

Mr. *Michael Myers.*

1763. YOU are a fishmonger in the city?—I am.

1764. Is there anything in the manner of the sale at Billingsgate which in your opinion requires alteration?—I think there might be a further regulation, by which the sale of fish might be altered greatly to the advantage of the public, in my opinion. I think the market has never been in better order than it is in at this day; but there might be a regulation concerning the buying and selling of fish over and over by different persons, which must be greatly to the disadvantage of the consumer, and to the public at large.

1765. What do you mean by buying and selling fish over and over?—There are what are called the bombarees, they buy a very large quantity of fish, they know some persons that do not attend the market so early as the others, and consequently they lay in a large reserve of fish, and it is given to different salesmen to sell at the next market, and in consequence they make a large profit upon the

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fish before it comes to the consumer; if that were done away in the market it would be to the benefit of every person, except the salesmen.

1766. Do those bombarees buy down the river, or at Billingsgate?—They buy at Billingsgate.

1767. You think there is no forestalling before the fish comes to Billingsgate?—I am satisfied of it.

1768. Do the bombarees buy bad fish of the fishmongers?—No, they do not; they buy good fish.

1769. What different stages does it go through?—Supposing I was a salesman, the bombaree purchases it of me, he sends it to another salesman to get rid of it again.

1770. How could that be prevented?—It might be prevented by an interview with Mr. Goldham; no man could prevent it so well as he, if he had the power to do it.

1771. What power would you have given to him?—That the bombaree should not be allowed to expose the fish till a certain time afterwards, and any forestalling of that kind should be subject to a heavy penalty, I would not say money, but a punishment; because a little money is no object.

1772. What do you mean by a punishment?—I would have them fined, or confined; there is a great deal carried on; for example, with respect to salmon; one salesman will purchase it of another, and keep it in ice for a considerable time, till there is no salmon in the market, and consequently that will be sold for a large price, although it is not fit for any consumer to eat, because the ice will take all the goodness out of it, from the length of time it has been lying; but it perhaps may fetch 2 *s.* 6 *d.* a pound, and the fishmonger is bound to get it when he has an order for it.

1773. How can you tell whether it is a sale for the benefit of the bombaree, or whether it is a sale for a *boná fide* transaction?—The moment I buy anything of a salesman, and I disguise it, and give it to another man to sell to another salesman, on a rise of the market, that would establish it in a moment.

1774. Are the bombarees the first purchasers from the vessels?—No, there is nothing sold in the vessels; it is all brought into the market on the form, and anybody may purchase.

1775. In short, the bombaree comes into the market like any other person, and he purchases upon his own speculation?—Exactly; and he may lose as well as gain.

1776. Is there any other means by which you think the public might get a better supply of fish at a cheaper rate?—I cannot say that there is; the more vessels there are at sea, of course the more quantity of fish comes to market; and I think that if there were more fish came into the market they would not be consumed.

1777. How many years have you been in the trade?—Thirty years.

1778. What have you observed with regard to the increase or decrease of fish?—There is a great increase. I leave shop at five o'clock, and I generally order my man to sell opposite to my warehouse-door, and he finds more difficulty in a poor person buying a bit of fish than a rich man, because if he had 100 mackarel to sell he would not get rid of them, but if he had eight or ten salmon to sell, he would get rid of them immediately. It is a mistaken idea that a poor person will eat anything; they are more dainty than the first gentleman in the country. When I was with the Fish Company, in 1825, they wanted to establish a sale of fish for the poor, and orders were given to my servants to sell fish at almost any price, but the poor would not buy it.

1779. Do you destroy much fish?—I do not. I do not think for the last five years I have destroyed much fish; I give a little away in the afternoon to some persons; we have 20 or 30 persons that have seen better days, that I give a little to, but nothing of any consequence.

Captain *Joseph Mortleman*, called in; and Examined.

Captain *Joseph Mortleman.*

1780. ARE you a native of Harwich?—Yes.

1781. Have you been for many years acquainted with the fishery carried on at that place?—I served my time to the cod fishery, but I have been out of the fishery 40 years.

1782. Have you observed that that trade has declined?—Yes, very much indeed since I was in the fishery.

1783. What

1783. What number of smacks used to go out of Harwich?—I have known 74 or 75 in my recollection.

1784. Was that trade at that time very productive?—At that time it was.

1785. That was prior to the war?—Yes, in 1791 or 1792.

1786. At that time, were our fishermen prevented from going within any particular distance of the Dutch coast?—I do not recollect; we never fished near the Dutch coast; we fished chiefly upon the Dogger Bank.

1787. Was there any other part of England, besides Harwich, from whence any considerable number of vessels came at that time to the cod fishery?—From Gravesend, and a few from Barking; the vessels from Gravesend and Barking used to go about 10 or 15 leagues from Cromer.

1788. Can you state the number of them?—From the two places, I think, there were 30 or 40 sail of vessels.

1789. Has the cod fishery trade declined at Barking and Gravesend as much as it has declined at Harwich?—No, it is rather upon the increase; I think there are three times as many vessels as there used to be in the river at Gravesend, and Barking and Greenwich.

1790. Besides the vessels from Gravesend and Barking, are there any considerable number of vessels from other parts of the British coast that also go upon the cod fishery?—No, very few.

1791. Whereabouts is the principal cod fishery found?—It used to be on the Dogger Bank, but now they fish more along the coast.

1792. Is the cause of that, that more fish are found near our coast, or that they meet with any difficulties or prevention upon the Dogger Bank?—It is a little way to go; and they get as much in a week as they can in a fortnight or three weeks on the Dogger Bank.

1793. Do not some vessels still go on the Dogger Bank?—Yes, with a long-line.

1794. Those that go upon the coast, how do they fish?—With long-lines too.

1795. Are you of opinion that the Dutch in any way interfere with the cod fishery, prejudicially to us?—No; they fish upon the Dogger Bank too.

1796. Is there any fraudulent sale of foreign fish, contrary to the Act of Parliament, in the cod fishery?—No.

1797. Therefore, may it not be inferred that the declension of the cod fishery has arisen more from the transfer of the fishery to other places, particularly to Gravesend and Barking, than from any other cause?—Yes; at the time of the war we lost a great many vessels, and they never were replaced; I recollect seven or eight vessels being lost coming from the Dogger Bank, and they never were replaced afterwards.

1798. The Committee have been informed that the present number of fishing smacks at Harwich is only ten?—I do not think there are above five.

1799. If they could catch fish so readily as you describe upon the shore, why should they, with every advantage of contiguity to the place, give up the trade, while others from a distance find it answer?—I do not know, but it is so; there is nobody of any capital engaged in it.

1800. Are you informed also respecting the turbot fishery?—Our vessels used to go catching turbot along the coast of Holland, but that is given up; they made them pay so dear for bait when they went in.

1801. There is an impression that if the Dutch and French were prevented from selling turbot in our market it would be a great benefit to our seamen; have you formed any opinion upon that?—No; I have seen the vessels many times fishing off the Texel, but they have to pay so dear for bait.

1802. Do they catch turbot with a line or with a trawl?—Generally with a long-line, the same as the cod, and I have seen them all along the coast to Heligoland; they catch many fish in trawls.

1803. Do you know anything of the practice of the Dutch in charging a duty on smelts?—Yes; I understand they charge a duty, as much as 8*d.* a pound; they used to pay from 8*l.* to 10*l.* a voyage for bait.

1804. Do we charge any duty upon the Dutch vessels that take lampreys?—I do not think the Dutch take any lampreys now from us.

1805. Have you any suggestion to offer by which you think the British fishermen would be benefited?—If foreign turbots and eels were prohibited, I think it would be beneficial to the British fishermen.

1806. But you have nothing to suggest so far as the cod fishery goes?—No.

1807. Do

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1807. Do you think the want of capital at Harwich is the principal cause of the declension of the trade there?—I think it is chiefly that.

1808. You were understood to state that a great decrease had taken place during the war?—Yes; several vessels were taken during the war and they were never replaced afterwards; I think there were eight or ten vessels taken at once and sunk.

1809. Were their places supplied by vessels from the river?—The vessels from the river kept increasing; they have always had an advantage in consequence of their lying in the river near their own homes at the markets, and when the Harwich vessels have come they have had to lie there several days at a distance from home.

1810. How do you account for the increase of fishing vessels from the river and the decrease at Harwich?—I cannot account for it; they give more wages to the men at Gravesend than they do at Harwich; I believe it has been done chiefly by the companies here of tradesmen, such as rope-makers and sail-makers; they generally take a vessel between them, and they have got on in that way.

1811. Previous to the revolutionary war, did the Dutch boats supply much turbot to the London market?—I believe ever since I can remember.

1812. Then, during a greater part of the war, must not that trade have been stopped in consequence of the war with the Dutch?—Yes.

1813. Do not you suppose that the natural consequence of that would be to increase the number of vessels out of the river, when we could not get the turbot from the Dutch?—I believe they got them then by some means or other.

1814. Has the price of fish fallen or risen?—It has fallen very much; I have bought a fish lately at 1 *s.* 6 *d.* that used to fetch 4 *s.* or 5 *s.*

1815. If the importation of foreign turbots and eels were prevented, do you feel convinced that the English boats could sufficiently supply the market?—They used to do formerly.

1816. Is the price of turbot higher than it was during the war?—I do not know what the price is, they used to be very dear then.

Mr. *John Tyler*, called in; and Examined.

Mr. *John Tyler.*

1817. ARE you a salesman of fish in Billingsgate?—I am.

1818. What class of fish particularly do you deal in?—What they call trawl fish principally, but it is not confined to that; turbots, soles, plaice, all descriptions of fish that are caught with a trawl.

1819. Has there been any great variation in the price of turbot during the last few years?—There has been a great diminution of price within the last 14 or 15 years.

1820. Were they much higher during the war?—I should think 100 per cent. higher.

1821. To what do you attribute the difference of price?—I attribute it to the great supply.

1822. What is the cause of that?—From the increase of vessels.

1823. Do you mean English vessels?—Yes; there are more caught now than there formerly were, by the increase of English vessels. At Barking, from which I have my principal consignments, I should think there is an increase of 40 or 50 vessels during the last 14 or 15 years.

1824. Do not you consider the demand for fish much greater than it was?—No, I do not think it is.

1825. Has not the population very much increased?—It has; but I think when fish ceases to be an article of luxury, it is not much used; the common fish is used by common people, such as plaice and soles, when they become very cheap.

1826. Do not you consider that soles and the higher sorts of fish are now sought for by tradesmen, that formerly were never at the tradesmen's tables?—They will give a certain price for them.

1827. Do you think the supply is as regular as it can be?—Quite as regular as the weather will permit. In gales of wind, if there were 50 times as many vessels as there are now, we should have no fish in the market.

1828. Do the poor purchase much fish?—A great deal of common fish, such as plaice and soles, when they are at a very low price indeed.

1829. What do you call very low?—Fifteen shillings a bushel, or 18 *s.*, and sometimes 1 *l.* they will give for them.

1830. Is that to retail again or to consume?—I mean the poorer class of purchasers.

1831. Are you in the habit of selling foreign fish coming to market?—I do not know any foreign fish that comes to market, except turbot and eels.

1832. Do you think there is any illegal dealing in foreign fish?—Not that I am aware of; and I am of opinion if the Dutchmen were not allowed to come, we should have more turbots in the London market than we have now, because it would induce our fishermen to speculate to catch them themselves, which they do not do now.

1833. Have you any idea of the relative proportions of the English turbot and the Dutch?—Generally, at this season of the year, they used almost to monopolize the market, but they have not been so successful this year, because they say the turbots are scarce.

1834. You are aware that our fishermen cannot go upon the grounds where the Dutch catch those fish?—I was not aware of that; the Dutch take them where our fishermen catch them themselves, very often upon the Dutch coast. We have a supply of turbot from Hartlepool, but they are not estimated so high as the Dutch turbots.

1835. Is there any large quantity of turbot comes out of the British Channel below Dover?—Yes, between Dover and Calais, and off Margate and the Foreland they catch some, but it is a very small part.

1836. How are the foreign fishermen paid; are they paid in cash, or do they carry back any English goods?—I never heard of their taking any English produce away with them; they generally take away gold, I believe. I attribute partly the circumstance of the Dutchmen not going this year, to their losing 400*l.* by the failure of their factor last year, which makes them rather shy this season in coming to the London market.

1837. What is the class of persons in the market called bombarees?—They are a class of persons who purchase of the salesmen and then retail it out to the smaller fishmongers.

1838. Are there many of them?—There are several of them, but most of them are in a very bad state, they do not get anything scarcely by their business; you can only trust them for one day.

1839. Have they shops or stalls?—Only stalls.

1840. In Billingsgate market?—Yes.

1841. Are they regularly known as middlemen?—They are middlemen; they purchase lots which may not suit the best fishmongers; a fishmonger may be very choice, and he goes to those persons to pick out what he pleases.

1842. You have stated that a quantity of low priced fish is bought by the poor; do you mean the poor in London, or the poor in the country?—The poor in London.

1843. Are they large purchasers of fish?—Yes, the cheap description of fish.

1844. Do they seek it anxiously?—Yes, very; indeed, I should think there are an immense number of persons get their living by selling plaice.

1845. Is it English plaice or Dutch plaice?—It is caught on the coast of Holland.

1846. Do you think there is much fish wasted?—None that is good.

1847. You think there is none destroyed?—None at all, anywhere.

1848. Do you think the supply is taken off pretty well?—Sometimes, with a very great supply, we find a difficulty in selling it; but the poor buy it at some price.

1849. Did you ever know fish refused by the poor?—Yes, I have known it.

1850. How late does the market continue?—We keep there as long as we can possibly sell, till two or three o'clock in the afternoon, if any customers remain; but that is very seldom; generally speaking, at this season of the year, there is not much business after half-past nine in the morning.

1851. Are there any irregularities in the market that you think are worthy to be noticed?—Not any; since Mr. Goldham has been chosen clerk, it has been much better regulated than it was before.

1852. How long has he been clerk?—I think five or six years; it is not the disposition of the salesmen to sell bad fish, but the fishermen sometimes send it up in the boats, and Mr. Goldham sometimes prevents its being sold.

1853. Do you think Mr. Goldham has sufficient power to prevent bad fish from being sold?—Decidedly.

1854. What is the punishment for exposing bad fish to sale?—I believe you render yourself liable to an indictment.

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1855. What is done with the bad fish that is seized?—It is thrown into the Thames.

1856. Is much fish spoiled on its way up to the market in the summer time?—Perhaps upon the fishing ground there is; but the fish that they catch is put into trunks, which the fishermen overhaul, and take out the bad fish and throw them away; they are obliged to do that to save the others.

1857. Does that take place at Gravesend?—No, before they come there; they do that with every description of fish they wish to keep alive.

1858. Are not large quantities of fish kept at Gravesend when they get intelligence that the market is overloaded?—Not the trawl fish; the supply is so great that the object is generally to sell the fish they have got as soon as they can, and go away and catch more; formerly that used to be done, but that is quite done away with some years past.

1859. The Committee understand that you do not deal in the sale of herrings and mackerel, and therefore you cannot state positively whether any foreign herrings and mackerel are brought in?—No.

1860. Do you get much small fish?—Yes, sometimes a large quantity of haddocks and whitings; nothing smaller than whitings.

1861. Do you think, generally speaking, that the supply of fish is quite equal to the demand?—Quite; the fishermen scarcely can get a living now; and I should think, generally speaking, they are in debt, because the price they get at Billingsgate does not pay them; and there are a great many trawling vessels from Barking, which have almost annihilated the coast vessels, which send up their fish by land.

1862. What fish come by land?—Soles and turbots and brills.

1863. From what part of the coast?—From Harwich and Dover and Hastings.

1864. Do you get any from Brixham?—Occasionally; but very few.

1865. Do you get many from Folkestone?—Very few now; they come with mackerel from Folkestone, but none of the trawl fish; they send their head fish by land from Folkestone, and the common fish they consume in the neighbourhood.

Lunæ, 1° die Julii, 1833.

CHRISTOPHER T. TOWER, ESQUIRE, IN THE CHAIR.

Samuel Hewitt, called in; and Examined.

Samuel Hewitt.

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1866. DO you reside at Barking?—Yes.

1867. Are you extensively engaged in the fishery there?—More so perhaps than any other person.

1868. How many vessels have you?—Six of my own on shore, and four others.

1869. At what should you estimate the number of vessels belonging to the fishermen at Barking?—One hundred and twenty.

1870. Making in the whole what average?—Six thousand tons.

1871. Of what size are they?—From 40 to 60 tons, averaging 50.

1872. They are used principally for the cod fishery, are they not?—Yes.

1873. To what extent has this fishery increased of late years, since the war, within the last 18 years?—I should think one-third.

1874. What are the seasons in the year in which you principally go out to fish?—All the year round.

1875. They trawl in the summer?—They trawl in the winter.

1876. And fish for cod and haddock in the winter?—In the autumn and winter.

1877. Do you go in a fleet or separately?—All go separate in the winter time.

1878. Do they pursue the long-line system of fishing?—A great many of them; 40 or 50 sail.

1879. In what part do they generally catch the greater part of their fish?—Upon the Lincoln coast; very seldom on the Dogger Bank.

1880. Do they ever go off the Dutch coast?—Yes.

1881. How

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1881. How near do they approach the Dutch coast?—In sight of land; what they call land-dipping.

1882. Do they fish within a league of the Dutch coast?—Perhaps not; the shore is so flat on the Dutch coast generally.

1883. Do they ever meet with any interruption from the Dutch?—Never, fishing.

1884. They do not fish within the league of the shore?—Not within the league; I mean fishing in general.

1885. Do they ever trawl within three or four miles?—They cannot, because the shore is so flat.

1886. There is nothing to prevent them but the fact of the shore being so flat?—I never found any obstruction myself.

1887. You do not know any nuisance of vessels fishing within a league of the shore?—I do not.

1888. Within what period does your practical knowledge extend?—I should think it is about eight years since I left the sea altogether.

1889. You cannot speak of the extent of liberty given by the Dutch to our fishermen for the last eight years?—Not of my own knowledge.

1890. Can you, from the information you receive from others, positively state your belief of the fact?—I believe there is no obstruction upon the coast; I never met any, nor ever heard of any.

1891. You are not allowed to sell your fish there?—Not without paying a very heavy fine indeed: a friend of mine went into the Texel in distress, with a broken mast; he was destitute of provision and money, and he offered a few fish for sale, and it cost him, I think, between 9 *l.* and 10 *l.* before he left the harbour.

1892. They would not let him sell his fish even for repairs?—Not without he paid as a merchant's ship; there is always harbour dues.

1893. Is that you speak of, what you have been told?—That I am certain is true.

1894. The Dutch will not allow the English fishermen to fish in their best turbot grounds?—Yes, they will; there is very few turbots got within a league of the Dutch coast.

1895. Do you know anything of the Dutch fishing on our coast?—Very little; I have seen them fishing on our coast: I am aware they do fish on our coast; but they do not obstruct us at all, not as regards the Barking fishery.

1896. Are you prohibited by the Dutch from fishing within three or four miles of the coast?—I never heard that we were prohibited; I do not think there is anything to catch so near.

1897. Where is it the best turbot ground is to be found?—It is owing to the season; we get a long way to the east in the spring, and go to the western coast as the season advances.

1898. You do not go into the Dutch bays?—No.

1899. You have not practically followed it for the last eight years?—I have not.

1900. If any alteration had taken place in the fishery for the last eight years, you probably would have heard of it?—It is likely I should.

1901. Do you believe your men ever fish in the bays?—I believe they fish occasionally within eight or ten miles from the shore.

1902. But within Sceveland Bay do they?—I believe so; we often fish so that we can see the land.

1903. You seldom go within less than seven miles?—Seldom.

1904. Is it your opinion that if the French were prohibited from selling turbots, and also lobsters in our markets, that our fishery would be equal to the full supply of the market?—I am certain as regards turbots, from my experience, that there would be more turbots come to market; in the war time, the supply of turbots was small to what it is now, when the Dutch did not come.

1905. When of course no foreign fish found its way into England?—Exactly so.

1906. Did we not import by a smuggling trade a great deal of foreign fish during the war?—I think there was many of them caught by foreigners.

1907. As much then as we do now?—There were many turbots caught by foreigners though we bought them.

1908. As to eels, can you speak to them?—I cannot say anything about eels or lobsters.

1909. What would be the effect if an arrangement should be made under which cod, herring and mackerel could be exported and sold on the Continent, in Hol-

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land and France, subject to the present system of turbots being sold by them in our markets; would that materially benefit the trade?—Not at all.

1910. The French themselves are buyers of herrings?—Yes; but they are well supplied by their own vessels; we cannot compete with the foreigner as regards fishing.

1911. You do not think that any benefit would result to us from a power to export either cod, haddock, herring or mackerel?—Not at all.

1912. Supposing one of your vessels were driven into the Texel, would it not be a great benefit to you to have the power to sell your cargo?—I doubt whether the foreigner would be allowed the same privilege here.

1913. Would it not be a great benefit, if one of your vessels was driven into a Dutch port, if it was allowed to sell its catch of fish?—Certainly, rather than throw them away; it must be a benefit.

1914. You only speak with regard to your own trade?—Exactly so.

1915. There is nothing to prevent your selling now; although the foreigners will not buy, you may sell?—We may not sell anything in Holland or Flanders.

1916. There is no English law to prevent your selling your fish?—I never heard of it.

1917. You are aware that turbot, eels and lobsters are allowed to be imported into this country by foreigners?—I am quite aware of that.

1918. Do not you think it would be a good thing for us if turbot, skate and herrings were allowed to be sold in the foreign ports?—I would not give an opinion upon that; the Dutch harbours in winter time are very hard to get at.

1919. Do you know whether the fish are sold at a very cheap rate in Holland and France?—Not very cheap.

1920. Do you think if you took fish into French and Dutch ports, you would have a demand for it?—I think there is not much demand; if the supply was large, it would be very cheap there.

1921. Have you ever been much in the Dutch ports?—I have.

1922. Are you aware of the description of market there?—In the ports along the coast there is not much demand; the principal demand is in Flanders, at Ostend and Flushing.

1923. Are you concerned at all in what is called the carrier trade?—Not at all.

1924. You know what is meant by that, sending vessels to purchase out of ships to supply the market at a particular time?—There have been instances of it.

1925. There is a regular established trade, a very extensive one?—We do a little in it.

1926. Are you aware what proportion the foreign fishing vessels bear to the proportion of fish sold in the English market?—I am not aware of it.

1927. I understand that English vessels buy turbot of the Dutch on their coast, and bring them to England for sale?—That has been the case.

1928. This is the time of year when the Dutch come to Gravesend with turbot?—It is.

1929. What is the average number of vessels?—There were 13 last year.

1930. Can you form any idea as to the extent of their cargo?—Last year I suppose they might make three or four voyages each vessel, with 20 score of turbot each.

1931. Would you take that as an averaged year of supply from the Dutch vessels?—No, this year will not be near so much.

1932. Are you concerned at all in the sprat fishery?—Not at all.

1933. Is there any other point of information that you wish to give the Committee, or any suggestion for the improvement of the British fishery?—It is my opinion we could supply the market with turbot, as well as it is supplied, without their assistance.

1934. Have you anything to state relative to the cod fishery or the flat fishery?—No: we understood we were to have a bounty for our fish; we lost a deal of time in expecting it, but we never got it.

1935. Do you pay any tithes for fish embarking?—No tithes.

1936. Are there any boats do you suppose go out for the express purpose of buying fish out of foreign vessels?—Very few indeed. About three months in the year there may be eight or ten, the other nine months there are not any.

1937. How do you account for the increase of the fishery at Barking since the peace?—I suppose we have been more industrious than others; I do not know how else to account for it.

1938. It has been a profitable concern to you, I suppose?—I did not get my property by fishing, my father was a fisherman.

1939. Has the Barking fishery been successful?—Not of these late years.

1940. Then why has it increased?—It has not increased within the last few years.

1941. To what do you attribute its increase since the war?—There were not many vessels in the trawling business, and catching of soles and turbot, but the Barking vessels always kept the fishing; formerly in winter the weather was worse than it is now.

1942. Have the population of Barking increased very much?—Not much.

1943. How many men are employed in the fishery at Barking?—Seven hundred men and boys.

1944. How far do you lie from the London market?—Seven miles by land.

1945. You say that 700 men are only employed in your fishery, and the number of vessels are 120?—I have told you wrong; we average seven or eight men to a vessel. I know the number of vessels is correct, but I cannot speak for the men; there are none go with less than seven; we are licensed to carry nine.

1946. Do you use any improved method of fishing contrary to what they do in other parts?—No; in winter time we run to sea better than we used to do; we make a rule to keep to sea at all times, never to go to harbour; we run great risks, and are at a great deal of expense.

1947. Do you mean that you catch the most fish in the worst weather?—We come to better markets.

1948. Do your fishermen pay the dues to Greenwich Hospital?—We pay no dues.

1949. Are you aware of any regulation by which some fishermen pay dues to Greenwich Hospital, and others are excepted?—I am not.

1950. What may be an average of the voyages that each vessel will make through the winter months?—They make two or three in a month.

1951. Coming back with fish?—Yes.

1952. How far do they go in that case?—About half-seas across off Yarmouth.

1953. What time does it take you if you go off the Lincolnshire coast?—It is a long way, there is not trawl fish to catch on the Lincolnshire coast; if we go to catch cod we go on the Lincolnshire coast.

1954. What is your average number of voyages in the winter months as to the cod fishery?—We do not make a cod voyage much under a month; we take the cod season for about three months, and then we take the trawling season.

1955. Are there any impediments that exist to your selling it in any market in England you please; you are not bound to go to Billingsgate unless you please?—No.

1956. You are not aware of any regulation of the corporation of London which forces you to go to Billingsgate?—I never heard of any.

1957. And you may sell at Billingsgate to any one that you please?—We are forced to sell at Billingsgate to any one that will purchase.

1958. And the trade is quite free?—We are forced to sell a single fish if a person wishes to buy it.

1959. It would be a great injury to the fishing interest generally if fish was prohibited from being sold on Sunday?—I do not know anything about the Sunday trade.

1960. Your vessels go out on Sunday do they not?—Our vessels go out to fish, but we never sell on Sunday; our fish is not allowed to be sold on Sunday.

1961. Supposing you came in late on Saturday evening, would they purchase your fish if fish was prohibited from being sold on Sunday?—I cannot speak to that; we consider if our fish is not here by eight o'clock in the morning that the market is over.

1962. If your vessels come in on Saturday night do you suffer any loss from not being able to sell your fish until Monday morning?—We have always been used to do without it; if the wind forces us up on a Saturday we lay below until the next day.

1963. In fact, you keep your fish alive?—We do.

1964. You never heard that the Dutch have ordered the English off from their coast, when fishing for turbot?—Never, when fishing for turbot.

1965. Have you any difficulty in obtaining licences for your boats from the custom-house?—We have had a great deal of trouble.

Samuel Hewitt.

1 July 1833.

1966. Have you any trouble now?—None now; five years ago, I think, we had four licences in one year; then they gave us a licence for 12 months.

1967. What is it now?—We have a free licence now.

Mr. *Christopher Spashat*, called in; and Examined.

Mr. *C. Spashat.*

1968. YOU are a Fisherman at Barking?—Yes.

1969. How long have you resided there?—I have been at it 21 years.

1970. Are you an owner of vessels?—Yes.

1971. To what extent?—I have two vessels.

1972. Have you shares in any others?—No; I had another, but I have sold it.

1973. Are they welled vessels?—Yes.

1974. In what branch of the fishery do you employ them?—At different seasons, in each branch; first, to cod, then to trawling and sometimes to turbot.

1975. Where are they principally engaged in catching the cod?—Off the coasts of Northumberland and Norfolk.

1976. Do you ever fish on the Dogger Bank?—No.

1977. Or near to the coast of Holland?—Yes.

1978. What is the nearest point to the coast of Holland have you ever fished?—In the trawling business; I was there last Tuesday week.

1979. Whereabouts were you?—I was off Sceveland.

1980. How near were you to the bay?—Eight or nine miles.

1981. Did you go within the bay?—No.

1982. Did you feel you had liberty to go into the bay to fish, if you were so disposed?—Yes.

1983. You would not have met with any obstruction?—None whatever.

1984. Have you ever heard of any obstruction?—Not the least.

1985. You know of no instance of molestation to yourself or any other Barking fisherman?—I do not.

1986. Do you know of any instance of the Dutch fishing within a league of our coast?—Only in the case of catching herrings.

1987. Where and on what coast?—The Yorkshire coast, off Whitby, Scarborough and Flamborough Head.

1988. When they fish for herring, do they come within a league of our shore?—Within a league or two.

1989. Are you aware of their having molested any of our fishermen in the herring-fishing?—I never heard of it.

1990. Or broke their nets?—If they did, it might be from accident.

1991. Did you ever hear of their fishing in the Willett and Birham rivers?—I do not know that I have; I have seen the Dutch vessels there with long-lines for thornback, many times within the last two or three years.

1992. In the winter seasons?—Yes.

1993. Several vessels or only one?—Several; as many as from four to eight or ten.

1994. What do they fish for there?—Thornback.

1995. And what else?—I believe that is the principal.

1996. What do they do with them when they have caught them?—They take them to Dunkirk or Ostend.

1997. Our fishermen never buy of them?—They do.

1998. The price of cod-fish is stated to be considerably reduced; can you state what the extent of reduction has been since the war?—I should not think it fetches one-third of what it did.

1999. To what should you attribute that; is the quantity so much increased?—I expect it is the over supply that acts against the demand; I cannot account for it in any other way.

2000. Do you think if an attempt was made by any arrangement the respective governments might come to, that cod, haddock and other fish should be introduced for sale on the Continent, that there would be any market found for them on the Continent?—I think not.

2001. Do you know any instance of cod being sold in the Dutch ports?—I have known other fish, such as plaice, to be sold there, about 14 years ago.

2002. Not in the way of regular trade?—No; a vessel driven in by distress.

2003. Did you ever hear that the Dutch will permit a portion of the cargo, in case of distress, to be sold for repairs?—At the time I am speaking of, they charged the vessel 13*l.*, or thereabouts, for selling the few fish that she did sell.

2004. And

2004. And suffered her to sell fish to that amount?—No; I should not think the quantity of fish sold amounted to more than 2 *l.* or 3 *l.*

2005. The 13 *l.* was a penalty for selling the fish?—That was what the vessel was charged; what for, I cannot say.

2006. How do you catch your turbot principally?—With a net.

2007. Trawling?—Yes.

2008. Whereabouts do you now fish for the turbot?—A company of us of about 20 now are fishing off Sceveland.

2009. Is there a good supply of fish there?—Not very great.

2010. Are the Dutch fishing there as well as yourselves?—The Dutch are about 50 miles from us, north-west of Sceveland; they catch plaice there; but that would be so far from our market, that we could not get the fish here good, which makes us catch less fish, and get them to market in a better state.

2011. Plaice fetches an indifferent price does it not?—A very good price.

2012. If the French were prohibited from selling turbot, could our own fishermen adequately supply the market?—Yes, to a much greater extent than it is at present; 11 or 12 Dutch vessels in company could have 11 or 12 English vessels buying out of them, and keeping them at work; while they were catching we should be able to sell the fish.

2013. You are aware that certain fish, herrings and mackerel, are prohibited?—Yes.

2014. Now as to turbot; you have been an extensive purchaser of turbot in the character of a carrier for the market?—Yes.

2015. Are you of opinion that the Dutch, either from their greater perseverance or their greater skill in fishing, have an advantage over our fishermen, so that they can undersell our fishermen?—I consider the Dutch have an advantage over our fishermen.

2016. What do you attribute it to?—I believe the Dutch pay less duties than we do.

2017. What duties do you pay?—The same as a merchant vessel, on every article we use.

2018. Is there any particular toll paid to Greenwich Hospital?—None.

2019. Can you form any judgment of the proportion that the duty bears to the return price of the fish; what per-centage reduction it makes in the value of the fish?—I cannot.

2020. Have you been at all engaged in the herring or mackerel fishery?—Never.

2021. It is merely trawling and cod fishery?—Yes, and turbot; buying and such like.

2022. Do you know anything of the stow-boat fishery?—Nothing whatever.

2023. Is there any evidence you can give us you think would be useful, which we have not touched upon?—I do not know of any.

2024. The fishing trade at Barking has increased since the war?—Very much indeed.

2025. To what do you attribute its increase?—The population has got much greater, and times were a little better.

2026. Is the principal part of your population employed in the fish trade?—Yes.

2027. How many vessels are employed in the carrier trade?—Not above one or two just at this present time; last month perhaps there might have been 20 or 25.

2028. What is the reason of the difference?—The season is over now; I do not think there are any carriers afloat now.

2029. You never carry anything but turbot and lobsters?—We carry very few lobsters.

2030. Your Barking boats are not employed in ever carrying anything besides turbot and lobsters?—Nothing else, unless it be on the Scotch coast, when they may bring a few salmon or barrelled herrings.

2031. But they never bring herrings or mackerel?—Never.

2032. What is the proportion of fish do you think brought to this market in foreign vessels, compared with the whole amount brought to market?—Very little indeed, I should think; but I cannot form any correct idea.

2033. The Dutch boats come up to Gravesend, do not they?—Yes.

Mr. *C. Spashat.*

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2034. Do not they come up to Billingsgate?—They send up to Billingsgate in small boats.

2035. Do most of the vessels which come up to Gravesend come up to Billingsgate also?—No, they send their fish to the London market in small boats from Gravesend; when we buy of them we go over to the Dutch coast; sometimes they come up by machines; the vessels lie off Gravesend.

2036. Then the turbot is sold for the Dutch account at Billingsgate?—Yes.

2037. What proportion does the supply bear to the whole amount?—I should think about five to twenty.

2038. About one-fourth of the whole supply comes to Billingsgate from foreign vessels?—Yes, just at this time.

2039. You are speaking of the Dutch supply, and not thinking of the French supply?—Yes, the Dutch supply.

2040. Why do you think if the Dutch vessels were prohibited that the English vessels could supply us in greater quantities and at a cheaper rate?—The vessels that actually bring this turbot, would be catching the turbot at the same time that they are now taking them to and fro: our vessels would buy the fish of them and keep the Dutch vessels at sea, which would occasion a greater supply, because 11 vessels would be at sea the whole three months of the season, instead of half of the 11 being away six weeks out of the three months.

2041. You suppose the Dutch still to catch the turbot, but that the carrier boats bring them to our market?—Yes.

2042. The question we put is, supposing the turbot to be the exclusive right of British fishermen, not to be caught by the Dutch, but that it was contrary to law for the Dutch to sell a turbot; supposing such a law to exist, I ask you whether our own fishermen could supply the market as well as it is now supplied?—There is no doubt of it; we attempted it last year, a small company of us; we lost a little money and gave the concern up; we declined it, having so many foreign vessels to contend with. There is no question, if they were prohibited from coming, we could supply the market with a greater supply than it has at present.

2043. What duty is paid by the importers of turbot?—I think something like 6 *l.* per vessel.

2044. Laid on the vessel and not on the cargo?—On the vessel.

2045. Do you think the fishing trade of Barking has increased since the war?—There is no doubt of it.

2046. Do you wish to suggest anything to the Committee, by which you think the fishing business would be improved?—I have nothing particular to suggest.

Mr. *Thomas Harris*, called in; and Examined.

Mr. *Thomas Harris.*

2047. WHAT is your age?—Sixty.

2048. What period have you been engaged in the fishing business?—Ever since I was 14 years of age.

2049. And then you have been 46 years a fisherman?—I have not been at sea for this 30 years, but I am still a smack-owner, and have always been engaged in the business.

2050. We want to know if the Dutch have in the course of the last few years raised any obstruction or objection to our fishermen coming near their coast; and if so, to what extent?—I do not think they have rendered any obstruction to them on the coast; it is when they go into the harbours that they make them pay so heavy.

2051. Are you aware that there are great objections to our fishermen going into Sceveland Bay?—I do not think there ever was any.

2052. You said there were certain harbours they objected to?—There is the Maese and Texel, and any harbours along the coast.

2053. How many smacks are you the owner of?—Four.

2054. Do they carry nets with them when they go to Sceveland Bay?—Yes; I have not bought a fish for this 10 years.

2055. Are your smacks allowed to fish in Sceveland Bay?—Yes.

2056. Always without interruption?—Yes.

2057. You do not find any vessels offer to buy cargoes?—No; some of the vessels do; but we can always catch more than we can buy.

2058. What ports and harbours are those that they will not let you fish in?—I do not know that there are any fishing grounds on that coast.

2059. Are

2059. Are any of these harbours within Sceveland Bay?—No; I suppose that Goree harbour will lay perhaps 30 miles one way, and the Texel 90 miles the other way.

2060. What number of vessels have you?—Four now.

2061. Exclusively your own?—Three of my own, and one I manage for my son-in-law.

2062. And you employ them entirely in fishing, not in the carrier trade?—Entirely in fishing in the winter season, and in the cod fishery; I first turned my attention to the cod fishery in consequence of there being a bounty given; and from some mistake or other we have lost our bounty for these last five years.

2063. A witness from Dover has stated that he has often experienced great obstructions in fishing on the Dutch coast; are you aware that Dover people fish in any other way than that pursued by the Barking people?—I am afraid he went further than he ought; I do not think they go so far from the east or the north; as it respects the Dutch coast, I do not know of any Dover vessels ever going there.

2064. It is not usual, as far as your knowledge goes, for Dover boats to fish about Sceveland Bay, or in that quarter?—I am not aware of it; there is what they call the Torbay vessels, which may come under that denomination. They are now getting into the German Ocean, on the Brown Bank, but they have only been there for the last half-dozen years. They principally fish off Dover or Margate, or about there. I was very unfortunate as to the salt cod fish, in the first instance; the Edinburgh officers were so particular, that I bought the salt, paying the duty for it; I found they stopped the vessels, and then I lost the bounty. Our greatest grievance is on our own coast, where we are very much imposed on, and robbed to a very great extent.

2065. Do you think you suffer much more on our own coast; will you just state what it is that you complain of?—Many small boats that go round the vessels carry off a wonderful deal of fish. It is a common thing to send off fish from Gravesend by carriages to Rochester and the neighbouring markets, which is actually stolen from the smacks at Gravesend.

2066. But these are the people which you employ yourselves?—Certainly.

2067. Have any of the losses which you are subject to on our own coast with which foreigners have nothing to do?—The return for the fish is very inadequate; I do not suppose the fish averages 1 *d.* a pound in the bulk. I have proved that before the Board, at the time of the Metropolitan Bill; I should think that they do not average near 1 *d.* a pound in the bulk.

2068. Are you speaking of the actual price paid?—The actual price returned from Billingsgate market. The Dutch fishery I consider a very great injury to us; as regards the turbot, I consider that the English fishery would bring more turbot than is now brought to London.

2069. What is to prevent them bringing any quantity now?—Because the Dutch fishermen being allowed to bring them, there is not so many embark in the business; I should expect the Gravesend long-line vessels would go on that coast in the season if the Dutch were not allowed to bring them.

2070. You mean if they had the English market all to themselves?—Yes.

2071. Do you think it would be a great advantage if you were allowed to sell a certain description of fish in a foreign market?—I should think not; we wish to have no communication with the Dutch whatever, only when we are obliged to go in from stress of weather, we think it is hard we are obliged to pay so heavy, and they are not put on a par with us.

2072. You do not think the trade would be benefited at all by that arrangement?—I think not. The fishery would endeavour to guard against that, inasmuch as they would expect foreign vessels would be allowed to come here, and if they did it must ruin the fisheries; they are almost ruined now. In our place there are 120 vessels, and the town is in a complete bankrupt state.

2073. Should you not like to have the same privilege of selling three descriptions of fish, as the foreigner is allowed to sell turbot, lobsters and eels here?—I should expect they would apply for a similar liberty to come here; we could bring more turbot than is brought here, and it would be something for the fishermen to go out for at this time of year, when they have nothing to do.

2074. Can the Dutch fish cheaper and more successfully than the English?—I expect they can, for they do not pay duties on any of their articles, such as their cordage and sails, and every thing else; but to that I only speak from hearsay.

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2075. You could bring it cheaper than it is brought at present, if you had the market to yourself?—I think we could bring a great deal more; perhaps the larger quantity would pay us better than it does now, and it would be a relief to the public, for there would be more fish.

2076. That quantity, though under a reduced price, would pay the fishermen?—It strikes me so.

2077. I understood you to say, it was in consequence of the great quantity of fish brought to you, that it only averaged 1 *d.* per pound?—I allude to the great bulk of fish, not to turbot; if it was not for the few chance fish, the smacks would not make enough to pay the men's wages. It is a few of the high priced fish that keeps the trade up at all, and they do not fetch anything like the proportions that you are obliged to pay to the catcher. If I had been aware of your wishing to see them, I could have brought you the market notes for the last three or four years.

2078. Are you aware of the sort of price the Dutch get for their turbot is an average price per pound; what proportion do you suppose the turbot fetch to the Dutch per pound, or what proportion does turbot bear in the market to the other fish?—I cannot answer that without making a calculation. Our general return from Billingsgate is, perhaps, about 3*l.* a score, or it may be 3*l.* 10*s*; a great deal depends on the size. One vessel may go to Billingsgate with 20 turbot, which may not weigh three pounds a piece, while another may have 20 turbot which may weigh 14 or 16 pounds a piece; you cannot have a correct answer unless you see the size.

2079. The larger turbot do not always sell at the best price?—Not at all, it all depends on the quantity there is there; I have known large turbot of 20 pounds not worth more than 5*s.* or 6*s.*, at the same time a little turbot of six or seven pounds would fetch more money, or quite as much, and the small turbot is better fed fish.

2080. Do you think any plan could be adopted under which the fish market could be more generally extended; have you ever turned your attention to any plan under which any greater extension could be given to the market, which would be beneficial to the public?—The prejudice of the public at large is such that they would not eat this fish, unless they were acquainted with the flavour of it. When a vessel touches at a place which it is not much in the habit of visiting, the people would turn up their noses at fish of that sort.

Mr. *John Goldham*, again called in; and further Examined.

Mr. John Goldham.

2081. WE understand from a witness that you are fully aware of the great inconvenience sustained in landing the fish at Billingsgate, and that you are prepared to suggest a plan that would materially improve it; does not that come under the cognizance of the Lord Mayor, or does it require the special interference of the legislature to carry into effect any such improvement?—I rather think the witness alluded to the depredations that are carried on at Gravesend, not to the landing the fish. There has been an abuse of a salt vessel coming into Billingsgate-dock; formerly the salt used to be sold in the dock, in small lighters, but latterly the salt has been brought in vessels of 200 or 300 tons; they now carry it to warehouses in Thames-street, I presume in consequence of it being a great saving, instead of it going to a wharf. Were these vessels not allowed to come into Billingsgate-dock it would be a great accommodation to fishing vessels.

2082. It would make more room for the vessels to come with the fish?—A great deal.

2083. But it is not a matter of regulation with the Lord Mayor?—It is an abuse which has crept in. We think that if we had your sanction we should be able to get rid of the nuisance; I think a recommendation would have that effect. Billingsgate-dock is very small at present, and if the vessel comes in about the middle of the market, where she lies we might put six or seven hatch-boats laden with fish. Any recommendation of that sort would strengthen the Lord Mayor, and enable him to get rid of the nuisance.

2084. Have you any doubt of the power of the Lord Mayor to correct it?—We think it might lead to an action; it would be an immense accommodation to the fishing interests.

2085. Are there any other regulations which you would wish us to notice?—Respecting the depredations carried on to a great extent at Gravesend, Barking and Southend, the fishermen are plundered to an immense extent. There are a great number of boats continually going round the fishing smacks at Gravesend, and purchasing

chasing fish from people, which has been stolen, and carrying it ashore to Gravesend, and selling it; carriages come to Gravesend and take these fish away constantly, the same as they would come to our market at Billingsgate and carry them round to Sittingbourne, Canterbury, and that part of Kent. Mr. *John Goldham.* 1 July 1833.

2086. Are you aware of any regulation with the corporation of London, that forces all vessels to sell fish at Billingsgate?—No.

2087. You are aware that by Acts of Parliament of the 29th and 33d Geo. 2, all fish that arrives at the Nore is forced to be sold at Billingsgate?—It appears so by this paper [*handing it in*]; but I was not aware of it until I looked over it this morning.

2088. Is this in force at the present moment?—I believe so.

2089. Who are you appointed by?—By the corporation.

2090. Have you some printed instructions?—No.

2091. What do you take as the guide of your conduct?—I have written instructions to regulate the market and collect the duties, as yeoman of the waterside; I am the principal oyster-meter, and have power to seize any bad fish.

2092. Do you not consider yourself particularly bound by some Act of Parliament?—As yeoman of the waterside, I am.

Mercurii, 3° die Julii, 1833.

JOHN HALCOMB, ESQUIRE, IN THE CHAIR.

Mr. *Walter Smith*, called in; and Examined.

2093. WHERE do you reside?—At Brixham, in Devonshire. Mr. *Walter Smith.* 3 July 1833.

2094. What age are you now?—Seventy.

2095. How long have you known the Brixham fishery?—Sixty years.

2096. Do you follow the fishery yourself now?—I do not occupy myself at sea now, but I am an agent and purchase fish, and cure fish on shore, for the last 14 years; I was 47 years at sea fishing.

2097. You have boats now of your own?—Only one small one.

2098. How many vessels are now employed at Brixham in the fishery?—There are 112 vessels, from 30 to 40 tons, or I believe there is one or two of 41 tons; there are 70 from four tons to 18 or 19, that is the smaller class; there are two classes of fishermen; the trawlers are from 30 to 40 tons.

2099. Is there any other class?—The smaller class; I suppose there must be 20 from 10 tons to 17 or 18; and then there is another class, the small hooking-boats again.

2100. Will you describe the mode of fishing of each class of boat?—The large vessels use trawling, that is, with the net dragging on the ground from 45 to five fathoms of water in shore, and the others, that is the large class of smaller boats, fish with hooks and sometimes with long-lines, perhaps 300 or 400 hooks baited to catch cod and ling, and that sort of fish; then the smaller boats are merely for whiting and herring and mackerel.

2101. Large trawlers go to sea?—The large trawlers of the first class go to sea wherever they can find any clear ground to fish in; there are 70 of them that have been for the last eight or ten years up at Ramsgate in the North Sea fishing for the London market.

2102. How many hands are employed on board the larger class of vessels?—Four.

2103. Altogether?—Generally four hands in each.

2104. About 400 people then are employed in them?—Yes, or 420 men and boys.

2105. How many are employed in your smaller class?—Three men in the first class of the smaller vessels.

2106. That is about 300 altogether?—Yes; and then the smaller class again that go out for mackerel and herring, have sometimes two and sometimes three.

2107. Are there any people employed in the fishery on shore?—Yes, a great many that buy fish to carry away to the different markets.

Mr. *Walter Smith.*

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2108. Is there any trade of curing or salting fish carried on?—I carry that on.

2109. Is it generally done?—There is but one house in the town that does it, and I keep that.

2110. Are there many people employed?—A great many people I have employed in cutting and cleansing the fish and drying it.

2111. Have you not a population at Brixham of 5,000 or 6,000?—We have nearly 10,000, including all the men and boys that go in the vessels.

2112. And the greater part of that population are employed in the fishery?—They are employed in the fishery and coasting trade in large vessels.

2113. Is the fishery in a prosperous state now, or is it otherwise?—It is declining.

2114. Do you find that the fish are less plenty?—The fish is less plenty than it was when I went first to sea, and for years after.

2115. Can you give any cause for the decrease?—Yes, from the fishing in-shore; when the fish first come to life they make to the shore; the flat-fish is all spawned in the offing; the sea-fish shed their spawn about 40 or 50 fathoms water in the offing; sometimes we find it at 20 fathoms of water.

2116. At what season?—At the latter end of February, all March and part of April, the fish begin spawning; the little creature as it gets life makes to the shore and gets into shallow water in the bays, and there is the destruction of it; I have seen thousands brought to shore that have not been so wide as a 5 *s.* piece.

2117. In what part of the year do you find them get to shore?—They do not get into shore till the latter end of May; you may find at certain times some of the small fish in shore in the latter part of May, but not generally till the latter part of May and June, July and August and September; the fish is continually coming in all the summer months.

2118. Till the end of September?—Yes.

2119. Then, according to your opinion, the fishing in-shore in the bays during those months is the cause of the destruction or the decrease of fish?—They are the cause of it, and the trawls, and what they call drag seines at the bottom for the flat-fish; they drag ashore quantities of it, and there it lies and perishes in the sand after it comes on shore, fit for no market.

2120. Do your vessels trawl in the bays?—Frequently.

2121. What are the vessels that trawl in the bays and draw their nets?—All sorts of them.

2122. And the seines that are drawn along shore destroy as much as the trawls?—Yes.

2123. You would recommend during the months of May, June, July, August and September, to have no trawling or seining in the bays whatever?—No ground nets for fish; they destroy soles, turbot, dabs, plaice, and all kinds of fish.

2124. Is there any difference in the mesh of the trawl or net of the large boats and the smaller boats?—They have all got it too small, and they have been told of it; the law says, that they shall not have less than three and a half mesh; they have that in part of their trawl, or rather four inch; numbers of them have had four; but the lower part of the net that receives the fish is not two; what they call the cod end or the bag that holds the fish.

2125. Do you draw up much small fish in the seine?—Not much in the offing.

2126. What are drawn up are all destoyed?—When they are small and not fit for market, they shovel them overboard again.

2127. Are they all dead?—All dead.

2128. At what distance from the shore do you think it would be necessary, in order to preserve the young fish, that vessels should be prohibited from trawling?—In all the bays within the headland; there is for instance, Torbay, from headland to headland, and Start Bay, from Dartmouth, Maidstone, to the Start Point.

2129. In short, in every bay?—Every bay ought to be preserved during the summer months.

2130. Will you name what principal bays there are in your neighbourhood?—Torbay, Start Bay, and Teignmouth and Dawlish Bay.

2131. Are there any others?—We have none in our neighbourhood till we get to the westward of Plymouth.

2132. Do you know any others?—Yes, there is the bay called Whitesand Bay; but all the young fish comes in in every bay, and there it lies quiet.

2133. Are you of opinion that that regulation would benefit the fishermen?—benefit the breed of the fish in general.

2134. Do you remember that experiment being tried once under Lord Vernon's advice?—I was out with Lord Vernon in the vessel, and it was left for three or four months, and when the boats went out, they went too soon then, and tons of fish were then caught and tons destroyed.

2135. Do the Committee understand you, that the fishermen did not fish for four months?—Yes.

2136. What months were they?—I believe it was June, July and August, and upon the 20th September they began.

2137. In your opinion, that was too soon?—Yes.

2138. You went out with him?—I went out with Lord Vernon in his yacht to see.

2139. Did other people go out?—A great number of them; they began fishing by common consent on that day.

2140. What was the opinion of your all not taking fish during those four months?—That the fish increased a great deal more than was ever known.

2141. Did the fishermen, in consequence of that experiment, come to an opinion that it would be wise always to do it?—They were in general of that opinion; but some of them would go out at night when others would not, and tried the net and took the large fish, and threw the others overboard.

2142. Are they of opinion that it would be wise to prevent that?—I am, to prevent the destruction of the fish altogether.

2143. How would the fishermen employ themselves during the three months if you shut them out of the bay?—Go in the offing outside.

2144. Can they gain a livelihood there?—There is no doubt of it; they would have more fish consumed if it was left to come to perfection in the bays; for the fish, when it is left to its full growth, in cold weather leaves the shallow water and goes into the offing.

2145. Then are the Committee to understand that the fish, when the cold weather comes, go into deep water?—They do.

2146. Do they use ground nets on the outside?—All ground nets.

2147. Then, according to your idea, the young fish are principally on the outside?—No, the young fish come from the place where they are spawned, towards the shore.

2148. You imagine that during a particular part of the year, they are in the deep water only, and yet you seem to consider that it would be proper to allow ground net fishing on the outside during the whole year?—The small fish before it comes to any size, directly comes into shore; if the fish should fall in with any net, it is so minute, that it goes through the meshes.

2149. What reason have you to think that the fish shed their spawn in that deep water?—Because we do not find any of that full fish in shore at all.

2150. Is not the spawn washed into shore, and requires the sun to hatch it?—In the year 1830 a vast quantity of something yellow was driven in for two or three days in Torbay, and we looked at it and could not make out what it was; some said it was the stuff from the quarries; I did not think it was; a gentleman with a microscope could see life in it. I was of opinion then that it must be the spawn of fish; but there it lay in the sun. I watched three evenings and mornings; just as the sun would take effect upon it, it would all disappear and sink in the bottom; from seven to eight o'clock in the morning it would be up again.

2151. In what depth of water?—In two feet of water, so that you could go and take a glass or basin and take some of it; it was all along the Torbay, but we could not ascertain what spawn it was.

2152. What became of it after all?—It disappeared after about a week or 10 days.

2153. Before it disappeared had it anything like hatched young fish?—There was life in it, we could see by the microscope.

2154. Are you sure it was spawn?—Yes, we were all convinced that it was spawn.

2155. Do you ever fish up spawn from the deep water?—Frequently.

2156. In what state is that?—We cannot tell, it is about the net, and directly we find it about the net we take and shake it from the net before it is hauled in.

2157. Can you state whether there is life in it?—No, I cannot; it is a clammy substance, and it looks like brown sand, till you put your finger to it and feel it soft.

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2158. Is your experience such as to enable you to say whether it hatches in the deep water that you speak of or whether it comes to shore to be hatched?—That I am not quite sure of; but we do not find after the latter end of April any of that spawn in the net, and then the small fish begin to make their appearance in shore.

2159. Do you find the small fish out at that depth?—No, never; a certain one or two or three.

2160. But not anything like a quantity?—Not anything like a quantity according to the spawn.

2161. From that, do you rather think that the spawn floats in shore to hatch?—I rather think that the little incipient comes to life in the offing, and with a natural instinct gets to shore to prevent itself from being devoured by the large fish; I have no doubt that there may be one-third of what is spawned in the offing devoured.

2162. Are you able to form an opinion upon this point?—Some gentlemen think that the spawn, when it is at that depth, floats in shore and is hatched by the sun, and that it would not come to life at that depth.—I never saw it but that year in such quantities.

2163. What you did see in that year was very much like the spawn that is fished up in deep water?—I believe that spawn that we could not tell what it was, was whiting spawn, and through all the next winter and the spring following whiting were in such quantities that the oldest fishermen never saw such before.

2164. What was the difference of the spawn?—You cannot tell the difference; it is a brown colour, all the spawn that comes from fish.

2165. Was that spawn like the spawn you take up in the nets?—Just the same, of a light brown colour.

2166. You are of opinion that it would sufficiently secure the breed of fish if the bays were protected?—I am of that opinion.

2167. Supposing the persons were prevented from fishing near the shore, dragging their nets for four or five months in the year, would not that interfere with the taking mackerel and pilchard all along the shore as they do, very much?—It would not interfere with taking mackerel and pilchards, because that is caught with nets and seines; there are two sorts of seine; the one for catching mackerel does not interfere with the grown fish at all, it is only the drag-nets that interfere; the draught-nets do not interfere, and they take the mackerel that are coming into a bay, and they would catch more mackerel from being in greater quantities than what they are now.

2168. Then you would not interfere with catching mackerel and pilchards in seines?—No; it would be a benefit to the mackerel and pilchard fishery, because it would not destroy the quantities of fish that do come in.

2169. Is it only the drag-nets you wish to be prevented?—It is only the drag-nets; the beam keeps the upper part of the net about two feet from the ground, and the other part comes down on the ground.

2170. Drag and draught-nets mean the same thing, do not they?—No; trawl and drag-net are the same.

2171. The draught-nets flow along with the tide?—Yes; they have corks with the draught-nets, and the fish run with their heads in the mesh; the mesh for a draught-net is about an inch, or half an inch, large enough to take the herring.

2172. Do they keep their nets to that size?—Yes.

2173. So as to pass a half-crown through, and that takes the head of the mackerel or herring; it is adapted to the head of the fish?—Yes.

2174. Are the number of fishing vessels at Brixham increased or decreased in your lifetime?—They have increased; when I went to sea myself, my father took me to sea at nine years of age, there were but seven fishing vessels in the place.

2175. Now there are 112?—Now there are 112.

2176. Were there ever more than there are now?—No, there were never more than there are now; for there are a great many paupers on the parish from the fishery.

2177. Cannot you sell what you catch, or do not you catch enough?—In the summer time there is plenty of sale for it, but in winter time all the boats come up here in the North Sea to fish for the London market, so that we have not above 20 left at home in the winter.

2178. With regard to a fishing-ground at Brixham, in winter do you send your fish

fish from thence to the London market?—No; we used to send a good deal, but now it will not pay the land-carriage, for London is so well supplied.

2179. By what conveyance did you send it?—We used to run it to Portsmouth, and send it over-land.

2180. That is discontinued?—Yes.

2181. Why?—Because it does not pay for to send it so far over-land.

2182. What other markets have you for fish?—Exeter and Bath and Bristol and Plymouth.

2183. How is the fish transported?—By land to Exeter and Bath and Bristol.

2184. Is that at considerable expense?—They in general take it by water partly, and then it goes by coach after it comes to Exeter.

2185. Is there any means you could suggest by which it could be exported at less expense than at present?—No, none; because it is so far round to send by water; in the summer months we had 12 go round the British Channel to serve Bath and Bristol, to the end of September again.

2186. Then in the summer months, excepting those few that go round to Bristol, you have all your vessels at Brixham?—Yes.

2187. Do they go anywhere else?—To Ramsgate, to the North Sea.

2188. How many?—I believe from 60 to 70.

2189. At what time do they go there?—They sail from Brixham in about November, and some stop till about Christmas comes, and they remain there till the middle of June, or the latter end of June.

2190. What do they come home for?—They come home then because the weather becomes so warm that they cannot get their fish into London fresh enough for the market.

2191. What fishing have they at home?—Then the hake comes in, and whitings, and dabs and soals.

2192. Then they get a living in that way?—Yes; in the offing they catch all the fish.

2193. Within the bay or without the bay?—Without the bay.

2194. How do they dispose of their fish while in the North Sea?—They find a great quantity of fish in the North Sea for the London market.

2195. Have they any complaint to make?—They complain a good deal of the Dutch fishermen; the Dutch fishermen come in and spoil their markets.

2196. How is that; do the English vessels buy it of the Dutch?—The Dutch vessels, I have been informed, bring it to market.

2197. You do not know that yourself?—No.

2198. You hear them complaining generally of the Dutch fishermen coming into the market?—Yes; and some of our fishermen say that the salesmen in Billingsgate have a share with the Dutchmen in the fish; but how far that is true I cannot say.

2199. If those foreign fish were not in the market, are you able to supply the market sufficiently?—The English fishermen seem to think that they could, for there is a great deal of fish thrown away.

2200. Would not the fish be dearer in the London market if the foreign fishermen were excluded?—Perhaps some might; such as lobsters and eels.

2201. And turbot?—Some of our fishermen catch great quantities of turbot.

2202. If the Dutch were prevented from supplying turbot, is it your opinion that the English fishermen would increase in number, so as to fill up their places?—There is not a doubt of that.

2203. You mentioned in a former part of your examination, that you were in the habit of salting fish in some part of the year; what kind of fish are you in the habit of salting?—Hake, whiting, conger eel, cod, and ling.

2204. Any other?—Since the duty was taken off salt, there is no prevention for curing any kind of fish, but before there was; there was such a salt allowed by the Excise to be used; I petitioned for five salts that were not allowed before; that petition was presented by Lord Vernon.

2205. Did you get them?—Yes, I got them all.

2206. Was that a benefit to you?—Yes, I think it is a benefit to the fishery.

2207. Now that the duty is taken off salt, there is no hindrance of any kind to salting?—No.

2208. What quantity of fish is cured now?—I have cured as much as 20 tons while the duty was on salt; I have not cured so much since, because there has not been the sale for it.

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2209. What is the market you take the fish to when you cure the fish?—Round the neighbourhood.

2210. None go to Spain or Portugal?—No, no quantity; poor people buy it; and ships coming in would take a stock to last for their voyage, of salt-fish; I have been sending a good deal of salt fish dried to Guernsey by the traders.

2211. Brixham used to be very famed for the salting of whiting?—Yes.

2212. What do you call that?—Buckhorn; I have salted thousands of them.

2213. At the present time?—At the present time; and every year I salt some in summer.

2214. Do you export them?—I sell them to any person that comes and wants them; I never had a quantity to employ a vessel to carry; but always when they come to the bay they come ashore and buy a great quantity; some are sent to Portsmouth, some to Bath, and some to Bristol.

2215. Is there much pilchard fishery carried on in Brixham?—The pilchards have not struck in in any quantity for the last nine years.

2216. To what do you attribute that?—We cannot say.

2217. Do they fish for manure on your coast?—No, we never had any large quantities for manure.

2218. Do you meet with any interference from foreign fishery on the coast at all?—No; the French come to our coast and buy a great quantity of herrings for the French market.

2219. They do not interfere with your fishing?—No; they run the English shore down before they interfere with the fishing.

2220. Do they drag?—They hook; they do not drag; one vessel has 3,500 hooks, for a course of seven miles.

2221. How are your vessels licensed by the Customs?—Most of the larger vessels are licensed to go to the islands of Guernsey and Jersey, but the smaller ones are not. The larger ones do not go to Guernsey unless they get a quantity of fish, and then they run there to make a market for it.

2222. Is there a sufficient extent of licence for the trade?—Yes.

2223. Then there is no alteration, with regard to licensing those vessels, that you would suggest?—Not of the big vessels; but the small ones, that would go over the coast and catch hake and mackerel, are afraid to go lest they should be stopped for not having a licence.

2224. What sized vessels are those?—From 12 to 18 tons.

2225. Cannot they obtain a licence from the Customs?—They could not some time back, but whether they do now or not I do not know.

2226. Have you heard any owners of vessels complain?—I heard one: I said to him, "You have got a licence for Guernsey, if you should happen to go there fishing," and he told me, no, they would not grant a licence to extend beyond eight leagues from the British shore.

2227. You think it would be an improvement if they could extend that licence?—Yes.

2228. What do they catch?—Mackerel, by the hook and line.

2229. Do they catch large quantities by the hook and line?—Yes, sometimes 700 or 800, two men in the boat will catch.

2230. Are there any other parts of the coast that your vessels go to in parts of the season; do they not go to Liverpool?—Yes, some go to Liverpool; I believe there are five or six now.

2231. Then they go to all parts of the coast from Liverpool to the North Sea?—Yes.

2232. What is your opinion as to the trade generally, is it in a flourishing state or is it not, taking it for the year?—It is tolerably fair, when there is weather for them to go out.

2233. Brixham was formerly entirely dependent upon fishing?—Yes.

2234. But now it has larger vessels that trade to Newfoundland?—Yes, they go to the West Indies and up the Mediterranean, and engage in the fruit trade there.

2235. Can you suggest anything, besides what you have said, that would add convenience to the fisheries in general?—No, there is nothing strikes me, only we want a great deal more room in our harbour to stow the vessels that belong to it, it will not hold one-third of them; if we had from 10,000 *l.* to 15,000 *l.* it would make the best pier in the Channel for fishing.

2236. A pier might be made for that money?—Yes, for it is nothing but labour; for there is a large hill that would shelter large vessels as well as small; if Government

ment were to take that in hand, they might shelter 30 sail of the line there, and make a beautiful place of it.

2237. Were you deputed by the Brixham society of fishermen to attend here?—Yes, I was.

2238. Is there any other point upon which they directed you to speak to the Committee?—No, there is no other point.

2239. Do you know whether there is any difficulty with your Brixham fishermen in getting near the Dutch coast to fish?—No, they go as far upon the coast of Holland as they think proper in the North Sea.

2240. How near to the shore do you happen to know?—They do not wish to go too far over on the coast of Holland.

2241. Do you know whether the Dutch allow them to come there if they chose to do it?—Yes; sometimes they meet one another and board each other.

2242. In a friendly manner?—In a friendly manner. I have heard some of our fishermen say that they had exchanged sole for turbot and turbot for sole, and one market for the other; they are very friendly.

2243. Have you in your part of the world any interference by the French?—We have a great many French come over to our place.

2244. Do they interfere inconveniently with you?—No, they come in and purchase herrings for their own fishery to bait their hooks for ray, conger and ling.

2245. They do not fish on your coast?—Not at all; they go out of sight of the British coast to catch their fish.

2246. You have no complaint to make against them?—None whatever.

2247. Do you get licences from the Custom-house?—Yes.

2248. How far may they go with those licences?—The large vessels go all round the coast, where they please.

2249. Where may they go to abroad, may they go beyond a league of the shore?—They may go into France, if they please, but they will not let them sell any fish there.

2250. You are speaking of large vessels above 15 tons?—Above 30 tons; under 15 they have been denied a licence to go so far.

2251. What is the case as regards vessels between 15 and 30 tons; may such a vessel go into a harbour abroad?—No; they have no licence for it.

2252. Do they require a licence?—Yes; all Mount's Bay boats have licence to go to Guernsey, and our fishermen have grumbled about it a good deal, that the Mount's Bay boats should be licensed to go over to catch their mackerel and sell it there, while their boats are forbidden.

2253. Would it be an advantage to your boats to have a licence to go to Guernsey and Jersey?—Yes, and it would be of more advantage to them in this way to go over to the coast to fish, and in case a gale of wind should come on to run in there for shelter, and not be liable to be taken by the Custom-house; that would be the greatest advantage to them; they could run in without fear in case of bad weather.

2254. Under what tonnage are those vessels that are unlicensed?—Under 20 tons and above 10, from 10 to 20; there were some of them, I believe, eight or nine tons, that are boats well calculated to go over in the fine weather months to catch mackerel, but they do not like to go to Guernsey except they go to market their fish there.

2255. Do the Guernsey boats supply your market there?—Our boats, when they go over there, supply fish to the Guernsey boats.

2256. Do any of the Guernsey boats supply your market?—No; I never knew Guernsey boats come over, but I have known some of our boats purchase at the market at Guernsey and bring them over.

2257. Do the French boats supply your part of the world?—None whatever; I have known the Custom-house officers forbid the French to bring fish on shore.

2258. Do they attempt it?—No, they do not attempt it; I have known them when they have been there a week or ten days, in a gale of wind, carry their fish outside the pier and haul it overboard, not being allowed to sell.

2259. Are there many representations respecting your vessels, either as to the interference or the licensing, beyond what you have stated?—No.

2260. Do you know of any applications for extensive licences lately having been refused?—No, I cannot say that there has been any denial lately.

2261. What is the difference of the size of the Mount's Bay boats that you speak of

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of and the other boats?—The Mount's Bay boats are from 15 to 20 tons; there are different sizes of them, and they go over with a quantity of nets and fish there.

2262. Are they all above 15 tons?—Yes, I think they are above 15 tons.

2263. Are your boats that you speak of not having a licence, under 15 tons?—Yes; but some are above 15, 17 or 18 tons.

2264. You may call your boats then as under 20 tons?—Yes.

2265. Are the boats of 16, 17 or 18 tons refused licences?—No; I cannot say whether they are now or not, they were some time past.

2266. Do you know any now?—No.

2267. What is the largest tonnage of the Mount's Bay boats?—I dare say there are some of them up to 21 or 22 tons.

2268. You mean to say that they are pretty nearly the same class as the other boats?—Yes; only ours are clinker built, and theirs are plain built.

2269. Are you confined by law as to the number of men that you carry?—No, not by law; we can carry what number we please in any class of boats.

2270. You are not obliged to carry a certain number?—No.

2271. Is it your custom to begin your profession when boys?—Entirely from boys.

2272. Do they fish principally the year through?—Yes; my father took me to sea at nine years of age.

2273. Did you ever come into the narrow part of the Channel in your fishing?—I have been fishing in every part of the Channel all the way up and down; I have been fishing myself from Sunderland and Durham and Hartlepool to the British Channel.

2274. Before the French revolution, did you see French fishing boats close to our coast in the narrow part of the Channel?—Yes.

2275. Do you think that they came over as close as they do now to fish?—No; they do not fish on the coast into shore.

2276. Are you aware whether they fish on the coast of Kent now, or not?—They have done it on the coast of Kent, and our boats would go over and trawl with them.

2277. Are you aware that at this moment the French boats fish very close to our shore on the coast of Kent?—Not with their trawls.

2278. With their large nets?—Yes; they fish upon the coast of Yarmouth to catch mackerel.

2279. How near the shore?—Perhaps two or three or four leagues.

2280. Not within one mile of the shore?—No, I believe not.

2281. Did you ever see French fishing boats fishing three leagues off the coast before the French revolution?—I cannot say.

2282. Did you ever know them warned off?—I have known, before the war was, some of our fishermen to go and haul the craft and hooks up of a French vessel when it was near the shore, and bring it to shore and make a prize of it.

2283. Was it considered that the Frenchmen had no right to fish so near our shore?—The Frenchman begged and promised never to do the like again, and then they gave him his hooks and line again.

2284. Who gave him his craft, the magistrate?—The fishermen themselves, without the magistrate's interfering; they did not apply to the magistrate.

2285. Did you ever know, before the revolutionary war, French fishing boats being ordered away from our shore by revenue vessels?—No, I cannot say that.

2286. Can you say that they were not allowed to fish close to the shore?—I can say that they were not allowed to fish close to the shore.

2287. And you know one instance in which they took the lines up?—Yes, the whole of them, and brought them on shore; and I do not know what they were going to do with it; and the large boat came in and made a complaint to the fishermen, and they gave them the craft, with a promise never to do the like more.

2288. How far was this craft taken up from the shore?—Not more than four or five miles.

2289. In what part of the coast?—Off Torbay.

2290. Was it within the bay?—Not within the bay.

2291. Was it your usual ground?—In the Torbay fishing-ground.

2292. Suppose that you drew a straight line from headland to headland, is it within that line?—It was off the Bury Head.

2293. Was this about five miles off the Bury Head?—Yes.

2294. How far would a direct line from Start to Portland carry you outside the

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the Bury Head?—It would carry you three leagues without the Bury Head; and then when you get between Devon and Dorsetshire, it is seven leagues off.

2295. Before the revolutionary war, were you lying upon the coast of Kent sufficiently frequently to see whether the French fishing boats did fish near the shore or not?—The French fishing boats I have seen, and run over their craft; I was fishing near Dover, and I have been obliged, because I would not injure them, to catch hold of their buoys and turn them adrift from their nets, and let them go under the bottom of the vessel, frequently.

2296. Is that in Dungeness?—No, to the westward of Dungeness.

2297. How near did you ever see those nets to the shore?—Within a mile and a half of the shore then; that was before the revolutionary war.

2298. If you would not allow the fishermen to fish within four miles of the shore on the coast of Devonshire, how came the fishermen to allow the boats to fish within a mile of the shore?—I do not know; but I was there by myself.

2299. What did those fishing boats do with the fish?—The mayor of Dover used to allow the Frenchmen to come and sell fish in the market; I was there at one time with a quantity of fish that I caught, and I was selling my fish very well, and a Frenchman, who had about 6,000 mackerel that he had caught in his nets, put his fish down in the market beside me. I asked where the mayor lived, and they told me, and that his name was Turner, if I am not mistaken. I went to his house, and said, "I want to see the mayor;" and the servant said he could not be spoken with; and I said, "I must speak to him;" and afterwards the mayor came out, and I said to him, "I want you to stop a Frenchman from selling his fish contrary to law." "How do you know that?" said he. "I have an Act of Parliament, that there is nothing to be sold in England by the French but turbot, eels and lobsters; this is mackerel." The mayor said, "I shall allow him to sell it." "Then," I said, "you shall hear from another quarter." I came down, and in half an hour he sent his beadle down to order the Frenchman to put his fish in the boat, and leave the harbour.

2300. Was it blowing a gale of wind?—No, it was quite fine weather.

2301. You never let them fish near the shore on your coast?—No.

2302. Did you ever know any cruizers off the Kentish coast at that time employed to keep the French fishermen away?—No, I did not know that.

2303. Should you have known if there had been any?—Yes; I should have seen them if they had, during the three years.

2304. About what time might that have been?—I cannot charge my memory with it.

2305. How long was this after you had been at sea?—It was about 45 years back that I was at the Kentish coast; I was myself, with two more, the first on Torbay that went so far eastward fishing.

2306. Do not you know that there were any revenue cutters there?—Yes; I have seen the cutters cruizing about, but what their business was I do not know.

2307. You do know that they were there?—Yes; I have been frequently boarded by them, and overhauled by them, and been asked whether I have been over to Boulogne or Calais to bring tubs over.

2308. Do not you know that they were employed to keep the French fishermen off the coast?—I know that they were there; but whether they were there to detect smugglers or to prevent the French fishermen from coming, I do not know. I think it would be beneficial for the fishery to make the fishermen have every part of their net three-inch mesh, and not less.

2309. No part of the net less than three inches?—No.

2310. Do you mean the small end and all the cod end?—Yes.

2311. Do you consider it beneficial to have a smaller mesh in the cod end?—No, it would be injurious; they have got it too small now; the Act says three-and-a-half: it does not matter how large it is at the upper part of it, it is off the beam; it is the bag, that is 10 fathom below, that destroys the small fish.

2312. What is the object in making that part of the net so small?—To catch the small fish; to hold it as fast as they can.

2313. They do it on purpose?—Yes; they put it in baskets, and when it is caught it is not saleable; and during my time, when I bought fish to send to Bristol and Bath and Exeter, I have thrown away a great deal that was not good.

2314. What reason have they for catching that fish that is not saleable?—It is impossible to beat it into their heads; I have told them scores of times; there are

Mr. *Walter Smith.*

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very few of them that get the small end more than two inches; the Act of Parliament says three-and-a-half.

2315. Do you think it would be any benefit to your fisheries if there was somebody appointed on your coast to keep in force the Act of Parliament?—If it was not put in force they would use their own mind as they now do.

2316. Who do you think could best put it in force?—None but the magistrates, on complaint to them.

2317. There is no power by the present Act of complaining to the magistrates?—I believe not.

2318. Would there not be some difficulty in getting those complaints to the magistrates?—No; but there is one thing, now that the fish are such a size, that there is a charge upon it by the present law.

2319. Instead of making complaint to the magistrate, suppose there was a surveyor at Brixham, whose duty it was to see that the Act of Parliament was put in execution; for instance, yourself, as you are harbour-master?—That might have the desired effect.

2320. Would that be more effective than any complaint to the magistrate?—There is no doubt upon it; but then there must be some fine put upon them if they did do it.

2321. Can you give the Committee the least idea of the quantity of small fish that is caught by a small boat during a day's trawling?—It is impossible, for they take a great deal up in the summer, and then throw the fish overboard that is not fit to take to market.

2322. Do they catch thousands?—Many thousands.

2323. Every day?—Every day, and every boat, when they fish in the bays.

2324. What fish do you send to London?—Turbots, brill, soles and John Dories.

2325. Mackerel and herrings?—Yes, quantities of mackerel and herrings.

2326. Do you send any of those now?—No.

2327. Why?—Because it will not pay the carriage now; the market is glutted by one means and the other, and the price is reduced in London from what it used to be a great deal, so that it will not pay the fishermen the expense.

2328. When you say that you suppose the market is glutted by foreign fish, do you mean all sorts of fish; do you mean that the foreigners supply the London market with herrings and mackerel?—No, not supply it with herrings and mackerel, as far as I know, but the soles and plaice and haddock, and all that; but I hear our fishermen say that the salesmen in Billingsgate are in co. with the Dutch fishing boats; that they go shares with them; that is the report, but I cannot avouch it for truth.

2329. How many fish have you fished the last year yourself?—Thirty odd, I believe it is.

2330. Where is it that the English and Dutch vessels fish in common?—On the Dogger Bank, between Holland and England.

2331. About two-thirds of the way over?—Yes, or somewhere thereabout; it is out of sight of the English coast they go.

2332. Is there anything else that you would mention to the Committee that you think would do the fishery good?—Nothing more strikes me at present.

2333. A foreigner is not allowed to fish in Holland without duty; supposing that was extended, and a foreigner was prevented from bringing in turbot at all, do you think that would help the English fisherman?—There is no doubt of it.

2334. You used to catch turbot to a considerable amount?—Yes.

2335. Have you not a dear market now for all turbot you catch?—In some seasons of the year we have turbot come in in great quantities; sometimes in December and January, at Torbay; they come there in great plenty in summer time, but that would not do to send to London, on account of the distance.

2336. Have you a market for them elsewhere?—Yes, all the city of Exeter is supplied.

2337. So that turbot is a saleable fish?—Yes, as much as you can catch.

2338. Do you go as far as Bath with your fish?—As far as Bath and Bristol.

The

The fishermen at Brixham have been gradually getting poor for the last eight or ten years, and the poor-rates are very high.

2339. A good many of your fishing people are on the poor-rates now?—Yes, people that used to maintain themselves before, and keep themselves and families clear from it.

2340. Have the places in the neighbourhood which have established fishing boats for themselves, now increased in number, such as Torquay and Teignmouth, and all the little parts?—They have a few small boats.

2341. Have they increased their fisheries so as to serve their own towns with fish?—No, they have not, only with small dragging boats; they have no trawlers; they have endeavoured to have some but never could make them answer; they have been obliged to sell them again; I know four that the Teignmouth men had, and they have been obliged to sell them to the Brixham fishermen.

2342. None of those places supply any but their own places?—No, there are some from Dartmouth that in the fishing time bring fish east to Brixham to sell.

2343. Have other boats in your neighbourhood grown up so as to interfere with the Brixham trade and injure it?—None whatever.

2344. Is there much fish from Dartmouth?—No, very little, only in the hooking; they do not practise trawling.

2345. Are there not three vessels that are pilot vessels?—Yes, but they do not make a practice of trawling.

2346. What effect has the taking the duty off salt had; did that give them the stir?—It gave every one liberty to salt what fish he pleased in his own house.

2347. Did not that give a stir to the fishery?—No, it did not make any difference to the fishery; persons do not now purchase salt fish so much as they did.

2348. Are you in the habit of exporting salt fish from Brixham to foreign countries?—Not to export it there, only to supply vessels that were bound there; they would take three or four cwt. for their own ship's use, so that that used to take off a good deal.

2349. What used you to do with your salt fish?—I used to purchase them, I used to take them in quantities when they were low in price, and then salted them, and then had recourse to salt fish to supply the market round; and the fishermen would come and buy of me to carry them over to France to smuggle them.

2350. Do the French still buy them?—They still come and buy them, and when they buy their herrings, they get salt and salt them with me, unless they get a quantity and go out the same day while they are fresh.

2351. Do the French buy as much as they used to do?—Just the same.

2352. Then the French trade is an advantage to you?—Yes, to lay their money out; and when the Frenchmen come over, they buy a vast deal of earthenware to carry over; saws and tools, and all kinds of woollen they buy and carry over to France; they must smuggle it.

2353. Do you catch as many fish now in a day's work as you used to do?—No.

2354. The fish are much more scarce and much cheaper at the same time?—Yes.

2355. The Committee understand you to say, that you attribute that scarcity of fish more to the destruction of the young fish than to there being too much fishery on the coast?—Yes, it is more injurious.

2356. You think if you could protect the young fish, there would be plenty of fish?—Yes.

2357. Are you of opinion that if a law was passed to prevent them disturbing the bays during the breeding season, the fishermen would prevent any of their men from breaking the law?—I am sure the fishermen would inform one against another so as to prevent one from injuring the whole.

Veneris, 5° die Julii, 1833.

JOHN HALCOMB, ESQUIRE, IN THE CHAIR.

Thomas Jones, of Emsworth, called in; and Examined.

Thomas Jones.
5 July 1833.

2358. HOW long have you been a fisherman?—All my lifetime, from 12 years of age to this time.

2359. What age are you?—Fifty-four.

2360. Are you well acquainted with the harbour of Emsworth?—Yes.

2361. And Langston, Emsworth and Chichester harbours?—Yes.

2362. About what length and breadth is it; it is a considerable harbour with several entrances from the sea?—One entrance at Clue Harbour, and one at Langston; about three entrances into the harbour.

2363. What is about the length and breadth of it?—About four miles and a half to five miles.

2364. And then how broad do you think it is; now take it from Emsworth?—About five miles.

2365. Is that a place in which considerable fishing is carried on?—Yes, a great deal.

2366. What in particular, mostly oysters?—Oysters is the maintenance generally of the poorer classes.

2367. Your poor are principally supported by the oyster fishery?—Yes.

2368. How many boats have you that you use, belonging to Emsworth?—About 24 or 26 in Emsworth.

2369. Of what other places do they fish in common with you?—As many as eight or ten places.

2370. Altogether about how many boats have you?—From 120 to 140.

2371. Are these boats belonging to people who live within the harbour?—All of them.

2372. How many men do they carry?—One, and two in bad weather; in fine weather one and a boy, if a man has one of his own.

2373. Besides those employed in fishing, are there many hands on shore employed in your fishery?—There are as many as five or six in Emsworth.

2374. Is your fishery at present in a prosperous or decaying state?—It is in a decaying state.

2375. How long has it been going down?—It has been going down, I think, for these 30 years, or nearly.

2376. Do you remember any time when it was more prosperous than it is now?—Yes.

2377. How many boats used there to be 20 years ago?—Twenty years ago there was very little difference, rather more than there is now in Emsworth; there might have been 28, now it is 24.

2378. Can you inform the Committee to what cause you attribute the depression of your oyster fishery?—Yes; by the beard being taken away before it is grown, and before the season.

2379. It is taken up before it is in season and of sufficient growth to be properly sold?—Yes.

2380. What is the season, in your opinion, when they first become in season?—They become in season on the 5th September, that has been considered our season in Emsworth.

2381. Till what time?—The 12th May.

2382. Is that generally approved, or is it thought too early?—It was always approved of by the fishermen, ever since I lived there, till the depredators have come and taken them away for the 1st August.

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2383. At what age is an oyster marketable?—It ought to be two years to be the proper size.

2384. Can you tell when an oyster is taken up what age it is from its size, or what?—From its size.

2385. Under what size ought the oyster not to be taken away?—Not under two inches and a half over.

2386. Are they taken away in any numbers, less than that size?—Yes, hundreds of millions of this size and less than this [*exposing them*].

2387. What vessels take away oysters in that state?—They come from different parts; smacks are from 10 to 30 tons.

2388. Can you mention any place in particular that they come from?—From Faversham, in Kent, and from many places.

2389. Why do they take them away in that state?—They take them away to lay them on their own beds; but they kill them above half before they get there.

2390. Do you know that they ever do take them away and sell them to other beds?—I never saw them do it; I know they take them away somewhere.

2391. You have had some conversation with these people who come in the smacks?—Yes.

2392. Have not they told you that they take them for the purpose of laying down beds to the eastward?—Yes; for the purpose of forming beds somewhere else.

2393. To the eastward?—Some to the eastward, some to the westward.

2394. When you say you know an oyster to be fit for use in two years old by its size, do you mean to say all oysters are of the same size?—No, they ought not to be less than what I have stated.

2395. What sized vessels are those?—From 10 to 30 tons.

2396. What means do they take to get at the oysters?—With drags.

2397. That is a thing that is sunk from the ship and drags along the bank where the oyster lies?—Yes, a machine that is made on purpose.

2398. Do your small boats take them in the same way with small dredges?—Yes, but not so long or heavy.

2399. What do you do with your dredges when you take oysters that size?—Put them overboard again, in the same place where they came from.

2400. Do you know whether they fish principally for these oysters or do they come for other fish?—They come totally for these oysters, and remain till they have taken away what they can get to pay them, and then they do not come any more, they leave us in the winter to ourselves.

2401. At what season of the year do they come?—They came on the 1st or 2d of August last year.

2402. Do they take of the oysters to any considerable extent?—They take all they can.

2403. That leaves very little for the Emsworth people?—It does not leave enough for us to get our bread by.

2404. Is it felt as a heavy cause of complaint there?—It is a general complaint.

2405. Can you tell the Committee what number of vessels come in this way?—I have told 70 at one time.

2406. How long do they continue there from the time they first come?—It depends on what is in the ground, a fortnight or three weeks, six weeks if they have a good deal of spawn.

2407. Do they carry off what they catch?—They carry it off, and then come back again.

2408. Does that continue from the 5th of August until what time?—For three weeks or a month, according to what the oyster-ground affords to be taken away.

2409. Carrying back your memory as far as you can, did your Emsworth people ever export oysters?—Yes, in my time a great many.

2410. To any considerable extent?—As many as 500 bushels of a day for six weeks and two months together, in March, April and May.

2411. Do you know where they exported them to?—To Essex and Kent.

2412. For what, food, or to lay down?—For the London markets.

2413. Do they now send any to the London markets?—No, they do not remain long enough to get any.

2414. Did you formerly have a plentiful supply of oysters for your own neighbourhood?—Yes.

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2415. What was your market, Portsmouth and Chichester?—Yes, except when in the spring of the year we send them to London.

2416. Have you now a ready and good supply for your neighbourhood?—No.

2417. You hardly send any to London?—None.

2418. Do you know whether your fishermen laid down their beds or who laid them down?—I have heard some of my forefathers say they were laid there in the first place by them.

2419. Do you know where it was supposed they were brought from?—I do not.

2420. Are they very extensive beds of oysters?—About five miles in length and from 300 to 400 yards in width.

2421. That is, I suppose, considered rather a large oyster fishery?—Yes.

2422. Do the oysters multiply rapidly?—Yes, if they were not taken away, some seasons more so than others.

2423. Without carrying away fish of that size under the marketable size, would the oyster bed maintain itself?—Yes, plenty for all the country and the London market always.

2424. What would set your fishery up again?—I consider that it would be right to stop them from carrying away any more than comes to their growth.

2425. Would you suggest any time by which they should not begin to take them at all?—To give them a month longer in the ground than we did formerly; I would give them to the 1st of October, and leave off on the last day of April.

2426. In your opinion would that be beneficial to the fishery?—The oysters would be that much better and more plentiful.

2427. Then would you not come later into the market than you ought; is not the first beginning of the season the most advantageous?—No, in our oysters it is not so good, they do not get out of their spawn so soon as other oysters.

2428. Is there anything else you would suggest?—Heavy smacks destroy the breed of oysters which our small boats do not do any injury to.

2429. Do they tear up the ground?—Yes, they tear up the ground under such a press of canvass.

2430. Explain to the Committee what you mean by tearing up the ground?—They have over eight or nine dredges from those vessels, and going along with great force, they tear up the ground, which destroys the oyster.

2431. Are you sure that it destroys much of the young shell fish?—Yes, it destroys a great many.

2432. Have you seen that?—I have seen what they call the cultch torn all to pieces.

2433. What do you call the cultch?—The old shells and stones which the oysters breed among.

2434. You found that these dredges break these all to pieces?—Yes.

2435. You have seen that, and can give a certain opinion about it?—Yes, and they endanger the small boats likewise. I have been obliged to lay by four hours, and dare not go where that craft is.

2436. Why cannot you?—For fear of being run over by them.

2437. Do you use sail?—Yes, a little bit of a lug sail, from 18 yards to 20.

2438. You think you do not disturb the ground?—Not so much.

2439. Do you at all destroy the ground?—Not so much.

2440. Your proposition is that they should not fish with boats beyond a certain size?—I think not for oysters.

2441. Not at any time during the season?—Not at any time.

2442. In your opinion has that occasioned the scarcity of the oysters?—That, in taking all the beard away.

2443. Are you able to form an opinion whether the breed of oysters is now much less than it was before these smacks so interfered with it?—On an average season the spawn is no less.

2444. Notwithstanding the vessels have been doing this, the breed has kept up?—Yes, the whole that will keep.

2445. The fact is that your fishermen do not get any of it?—We could take some of the breed, but they take it away.

2446. Cannot you find enough of the larger oysters for your maintenance?—No, there are no large oysters left.

2447. Is

2447. Is there anything else you would wish to represent to the Committee?—I know of nothing else.

2448. Are many of your people now on the poor-rates?—I believe nearly every one; I think not above two besides myself that is not, and I should be one if I did not work at something else.

2449. Do these people used to maintain them and their families without relief?—They did, but the young ones now chiefly have help from the parish.

2450. Is the fishermen's trade a losing concern now?—A losing one; I never knew what a parish officer was in England, when I was young.

2451. You then lived by your own exertions?—Yes.

2452. Is there not other fishing in the place?—Yes, herrings, mullet, plaice and all flat fish of all descriptions.

2453. Is there any considerable number of lads employed in this fishery?—The same boats go after them in the proper season; the same men and lads.

2454. With lines or nets?—With nets.

2455. Is there any fish regulations wanting with reference to the mode or season of catching their fish?—There is a regulation that they should not catch the small fish so much as they do.

2456. What sized meshes have they?—They want them from one inch to two and a half.

2457. Do you think there is any alteration wanting as to the size of nets you should use?—No.

2458. I suppose they have large harbours there or different channels?—Yes, there are three principal ones in Chichester.

2459. In order to catch the fish, do they place the nets across these channels?—That has been done; they use what we call stopping.

2460. Is that the usual mode of fishing?—No.

2461. Is that unfair fishing?—Very unlawful.

2462. Unfair or unlawful, which do you mean?—Both of it.

2463. Is there any Act of Parliament at present to prevent stopping?—I have heard so.

2464. Why is it considered unfair?—They destroy a million to where they save one that is good.

2465. How do they destroy them?—The small fish will not come by the net if it is ever so big, and when they go to catch the fish they make the water so thick that the little fish will perish; I have seen millions.

2466. As the tide goes down the small fish will not go through the net, and are therefore left in the mud?—Yes, by the treading over the big ones they destroy the small.

2467. Is it by stopping the channel as the net is going down the small fish cannot get away from the mud, but are left there, and so die?—Yes.

2468. At low-water is this place left dry?—The net is left there till it is dry, and then the small is all destroyed.

2469. Is that openly practised?—Yes, it has been practised every day for these 20 years.

2470. If it is unlawful, why do they not take measures to prevent it?—I do not know what to do; I have gone to a bench of magistrates to prevent the oyster brood being carried away.

2471. What was the result of your application?—I do not know what the magistrate's reason was for not fining the people.

2472. Did he fine them or not?—No.

2473. What did the magistrate say; did he say he could not fine the people?—I do not know how it was settled, although I was there.

2474. At what season of the year do they catch this small oyster?—In August.

2475. What is the time for the spawning breed?—They begin in May; and I have seen them there as late as August.

2476. Do any of these people fish between May and August?—Not the smacks, or anybody else in the harbour; we do not suffer it.

2477. At the time they fish in the month of August for the oyster of this size, do you think they destroy a great deal of the small brood?—Yes.

2478. Do you recollect many years ago, that people used to come from the eastward, and get oysters of about the size of two inches and a half, and carry them away to lay them down?—Yes; to Kent and Essex, in the months of March and April.

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2479. Years ago the people to the eastward were satisfied with taking them at a proper time, and laying them down for a short time?—Yes.

2480. Have you ever thought of any time for catching other fish besides the oyster?—No, we never thought of any regulation for other fish; when a fish is in season he will come into the harbour, and when he is not he will keep at sea.

2481. Is that all you want as to the floating fish, that they should not be allowed to use the stop-net?—Yes.

2482. Do you think any regulation necessary as to the size of the mesh?—No.

2483. It has been mentioned to us, that the size of the mesh ought to be two and a half inches from knot to knot; would that do?—It would prevent them catching the herring.

2484. Have there been any regulations as to the fishing in your harbour?—When I was a boy there was a rule laid down by a magistrate, that no mullet should be taken unless he was 10 inches long.

2485. Whether that was a law, or was done by way of advice to the people, you cannot tell?—No.

2486. Do you ever fish at all on the French coast?—I have been on the French coast, but not lately.

2487. Did you ever hear of any fishing-boats paying 6 *d.* to Greenwich Hospital?—No.

2488. Can you tell what is meant by spawn, spat, or cultch?—The inside of the oyster is the spawn.

2489. About what season is that found?—In May, June, July and August.

2490. What is the spat?—It is about the size of a sixpence, found on the outside of an oyster, or on shells or stones.

2491. What is the cultch?—That is the shells and stones on which the oysters grow.

2492. Are the other fisheries besides the oyster fisheries of much importance to your neighbourhood?—Yes; sometimes a great quantity is caught.

2493. Are they caught by the same boats as the oysters?—Yes.

2494. What is the size of your boats?—Fourteen and fifteen feet.

2495. Do the smacks go after anything but the oysters?—No.

2496. They do not come with nets?—I have frequently seen them with a trawl, but not often.

2497. Is there any scarcity in the breed of other fish in your neighbourhood to what it used to be?—I think mullet and plaice are rather scarce, owing to taking them too small.

2498. What, in your opinion, should be the size of the fish?—A mullet should not be under half a pound, and 10 inches in length; a sole, nine inches; a turbot, 10; and a flounder or plaice, seven and a half.

2499. In your opinion would it be possible to regulate the size of fish that should be caught?—I think it is possible.

2500. And would it be beneficial to the fishermen?—It would be beneficial to every poor man.

2501. Do the fishermen wish that there should be a regulation of that kind?—I think the whole of them would wish that there was a regulation of that kind.

2502. Would you propose any regulations as to mullet and other fish?—They only come while they are in season.

2503. At all times when you find them in the harbour they are good?—[*The Witness withdrew.*]

Thomas Jones, recalled.

2504. It has been stated to us that it would be advantageous to prevent oysters from being taken before the 1st of October, and you have told us that the 5th September was the usual time; is the oyster good and fit for food after the 5th September?—He is not in general in the harbour.

2505. By dredging after the 5th of September, during the whole of that month, is any injury done to the breed or spat, or is by that time the breeding season gone by?—No; there is an injury done, and a great injury.

2506. Even by dredging through the month of September?—Yes; I have caught them even then with the spawn in them.

2507. When you spoke of these periods, did you mean to apply the time to any other place than the harbour with which you are acquainted?—Not to any other place.

Charles Mant, Esq., called in; and Examined.

2508. WHERE do you reside?—In Emsworth.

2509. Have you any profession or calling of any kind?—None.

2510. How long have you been resident there?—About 40 years.

2511. Are you well acquainted with the nature of the oyster fishery there?—Not as having taken an active part; but my observations will be confined to the general result of these fisheries. I find by the parish rates 25 years ago, that there was scarcely a fisherman receiving any aid whatever, except in illness; at the present period it is almost an universal custom of the fishermen to apply for and receive parochial relief.

2512. All the year round?—There are times when they are exempt, in favourable seasons; there is a select vestry in the place, which is very vigilant, and it sometimes occurs that a man makes application for relief and does not receive it.

2513. Therefore, you conclude that where they receive relief, they require it?—Generally speaking.

2514. Has the oyster fishery there ceased to be as beneficial as formerly?—Very greatly so. I am prepared to say from experience, that it is a very usual thing during the oyster season for me to want 100 oysters, and to be obliged to wait three or four days before I can get them. The smacks quit the harbour when it ceases to be a profitable employment, and then there is so small a quantity left, that the fishermen are unable to supply the neighbourhood with marketable oysters.

2515. These smacks come from some distance, I believe?—Yes.

2516. How long have they been accustomed to come to your harbour for this purpose?—It is about 35 years since the first smacks made their appearance in a very limited number, since which they have increased, at one time to the extent of 70; but that is a very unusual number. I have frequently seen as many as 30 lying at anchor, about two miles from the shore, engaged in dredging for oysters.

2517. From your inquiries on the spot, are you able to give the Committee the result of your opinion of whether this is injurious to the oyster-beds?—I verily believe it to be very injurious to the breed, and in proof of that, I may observe that we get no oysters of a good size.

2518. You have, I believe, brought with you some documents?—I have.—[*The Witness handed them in.*]

2519. Do you find in these documents, which contain the regulations of the Emsworth fishermen, that regulations are laid down as to the size of the oyster and the time of fishing?—The time of fishing, not the size of the oyster. There is a tradition in the place, that this metallic oyster [*exhibiting it*] was used for the purpose of regulating the size; some years ago, this was found in the harbour by a fisherman.

2520. Have you measured this metallic specimen?—It is nearly two inches and a half. This goes to show that the fishermen of Emsworth formerly attached great importance to the fishery.

2521. Within your memory, have smacks come for oysters from some distance in our own country?—Yes.

2522. Do you recollect whether these smacks used to come at a proper season and take away proper sized oysters?—Yes, to the best of my recollection in one season there were 27 smacks of large size taking from us as much as produced to the fishermen 1,600*l.*, independent of the produce of the supply that was afforded to the neighbourhood.

2523. Does the answer which you have now given refer to a proper period, and carrying away proper sized marketable oysters?—It does.

2524. Can you tell us from whence the seed oysters were obtained for Emsworth?—It is recorded in these papers that the Company, when establishing themselves, entered into resolutions to proceed to sea, and get oysters from the Isle of Wight or the harbour of Poole, for the purpose of making oyster-beds at Emsworth.

2525. Are you of opinion that any legislative regulations are wanting to protect this oyster fishery, as to the season during which they fish, or as to the size of the oyster?—I am perfectly convinced that the season being postponed to the month of October will be quite in time for the neighbouring consumption, oysters on the coast being rarely introduced until the cold weather is established.

2526. Is that a well-considered opinion of yours?—Perfectly so, in combination with many of my neighbours.

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2527. You are of opinion, that instead of the 5th of September it would be better to make it October?—I am.

2528. Is the oyster as good in September as in October?—No, it is not.

2529. At what time should it cease?—About the present time.

2530. With reference to the size of the oyster, do you continue of opinion that it should be two and a half inches?—Quite so.

2531. Is that the opinion of your neighbours?—It is.

2532. Since this Committee has been sitting, have your neighbourhood met in order to lay your case before the Committee?—They have.

2533. And in consequence, a petition was presented to Parliament?—It was.

2534. Is the oyster fishery at present in a very depressed state?—It is, very much so.

2535. In reference to the smacks and the dredges they use, do you think any regulation should be proposed to protect the oyster fishing?—Looking at the local situation of the place, I think the smacks so injurious, that they ought never to be permitted to come into the harbour to dredge; they do a great deal of mischief by working heavier dredges, and they prematurely destroy those oysters which, if left alone, would come to maturity after the smacks have retired; there is not a sufficiency for the consumption of the neighbourhood.

2536. Are you of opinion that oyster-beds ought only to be dredged by boats of 14 or 15 feet in length?—I am.

2537. You do not propose to exclude other people from coming to fish?—We ask for no exclusion whatever.

2538. You wish to restrain the size of the vessels employed?—Exactly so.

2539. As to the other fishing, the mullet, and so on, can you suggest to the Committee anything that wants alteration?—I think the size of the fish is the principal thing that wants alteration.

2540. Is it within your memory that there ever were such regulations?—Never.

2541. Have you committed to paper your opinions as to the length of the fish, and so on?—I have.

Remedial Measures for the Oyster Fishery in Emsworth Harbour.

No boat to dredge more in length than 15 feet, or with more than two dredges; each dredge not to exceed 18 lbs. in weight.

No oysters to be caught less than two inches and a half in width.

Dredging to commence on the 1st day of October, and to terminate on the last day of April.

Power to be lodged with a conservator, to compel the fishermen to a strict adherence of the regulations.

By these means, a regular supply of good oysters would be ensured during the entire season, which the neighbourhood is at present deprived of by smacks working an unlimited number of larger dredges in the early part of the season, and, after a few weeks work, quitting the exhausted beds of oysters, and leaving an insufficiency behind.

Remedial Measures for the Fishery in Emsworth Harbour.

No rith to be pinned by nets.

No mullet, base or codling to be caught less than 10 inches in length.

No turbot, less than 10 inches.

No whiting, less than six inches.

No sole, dab, plaice, brill, prill or flounder, less than eight inches.

A conservator to be appointed, with power to enforce the regulations.

2542. Are you of opinion that it would be for the good of the fishermen that some such regulation should be introduced?—Decidedly so.

2543. Would such a regulation be welcome to the fishermen themselves?—Quite so.

2544. A rith mentioned in this paper, means a channel in the harbour, formed by the water running off the banks of mud?—Yes.

2545. The fish frequent these channels?—They feed up these chan nels.

2546. The fish go up to feed, and the nets are put across there to prevent the fish returning?—Yes.

2547. Is that very destructive to the fishing?—Very much so indeed.

2548. It catches both small and large?—Certainly. This is illegal, and a person had a penalty enforced against him for so doing.

2549. Supposing such regulations to be introduced, are you of opinion some conservator should be appointed to enforce those regulations?—Yes, or they never would be carried into effect.

2550. Should

2550. Should the conservator be a magistrate, or a different person?—The conservator might be appointed by a magistrate. *Charles Mant*, Esq. 5 July 1833.

2551. Do you think the oyster season should be delayed to October, with reference to the general interests of the oyster trade, or merely local?—Locally. I have no knowledge of the general trade. My observations have applied to harbour oysters; oysters at sea become good for food at a much earlier period than in the harbours.

2552. Would you wish to add anything, or to explain any part of your evidence?—I have nothing more to offer to the Committee.

William Maine and *John Challen*, called in; and Examined.

William Maine and *John Challen*.

2553. WHERE do you live, Maine?—At Portsmouth.

2554. Are you a fisherman?—Yes.

2555. How long have you been so?—Upwards of 40 years.

2556. Are you a Portsmouth fisherman, Challen?—I am.

2557. What is your age?—Fifty-four.

2558. How long have you been employed in fishing?—Nearly 40 years.

2559. What kind of fishing have you chiefly been employed in?—In oyster dredging.

2560. On what grounds have you carried on your business?—Inside the Isle of Wight.

2561. How far westward?—I have been down as far as Yarmouth.

2562. How far eastward?—About five miles outside of the island.

2563. Have you also dredged for oysters in Langston and Emsworth harbours?—Yes.

2564. Was the oyster dredging trade better a good many years ago than it is now?—Yes, certainly; we had always plenty of oysters to supply the country round; people had no occasion to go anywhere else; now there are hardly any at all.

2565. What has caused this want of supply of oysters, in your opinion?—The saving the breed.

2566. For what purpose is the breed taken?—To lay down.

2567. At places in the neighbourhood, or to the eastward?—In the neighbourhood; in Portsmouth harbour, St. Helen's, and Langston.

2568. At what time is it those people take the breed?—After the smack season is over, when the east-country merchants come to purchase; when they have done, the people who stock these lakes begin and continue all the year.

2569. At what time do the east-country merchants come to make their purchases?—In February and the beginning of March.

2570. Do these people dredge themselves, or buy oysters from your fishermen?—They buy and dredge themselves.

2571. At this time are the oysters in a proper state to go to market?—They are all this time.

2572. After that do any vessels or large smacks come from the eastward to take the breed?—They do.

2573. Where do they fish?—On the same ground that we fish.

2574. What size oyster is it that they take away under the name of brood?—From the size of sixpence to a shilling or half-a-crown; they mix the large and small together.

2575. Is there a great destruction of the breed in that way?—Yes, we have proved it.

2576. How have you proved it?—It is frequently found on shells and stones, when it is in a tender condition, and it is destroyed by the dredging.

2577. Is this breed fishing carried on outside the harbour?—Outside and inside the harbour, where the oysters may be found.

2578. Is there any proper season at which the oyster fishing should leave off?—The oysters begin to shoot the latter end of May, June and July; then it is all in its growth, and when it is moved it is destroyed.

2579. Have you ever considered among yourselves, as fishermen, what would be the proper time for commencing dredging and leaving it off outside the harbour?—I do not know that that was ever discussed. When the east-country merchants come down we commence dredging in February, and leave off about the latter end

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of May after that. Until within these few years we had no occasion to disturb the ground again except for our own consumption.

2580. When you fished from February to May did you catch marketable oysters?—In size for the merchants to lay down for the London market.

2581. Are you now speaking of the practice of dealing with the east-country people outside the harbour, or the dredging inside the harbour?—The grievance we meet with is taking the brood in our own harbours, not carrying the oysters away when two and a half inches, for it is then fit for the market.

2582. Are you of opinion that two and a half is the proper size for the oysters outside the harbour?—Yes, both outside and in.

2583. Your grievance is that people take the oysters at an improper time?—It is a free and open ground.

2584. If you dredge so late as the end of May, do you not in dredging destroy the breed?—We do not conceive the breed is beginning to shoot materially until after that month.

2585. Do you think that a regulation preventing dredging in June, July and August, would be a sufficient protection for the oyster fishing outside the harbour?—We think two months would do for it outside the harbour, June and July, but inside the harbour it should be from the 12th May to the 5th September.

2586. From your knowledge of the oysters, are you satisfied there is that difference outside and inside the harbour that two regulations must be made?—Two regulations must be made; the nature of the ground teaches us that; the bottom of the harbour is hard, the bottom outside is of a muddy nature; to shut up that too long would be injurious.

2587. Is there any mischief done by dredging with very heavy dredges?—Not that I can conceive.

2588. Do you think that heavy dredges might produce mischief inside the harbour and they would not outside?—We use our dredges according to the hardness or the softness of the bottom; if the ground is hard we want a heavier iron to gather in what may be found; if the ground is soft we use a lighter dredge.

2589. Would there be any benefit in regulating the size of the dredge?—Not at all, for the ground in some places is very muddy, and among the cultch, as we call it, there will be the brood taken in with it. You can use no sort of net but what will enclose the brood.

2590. You want no regulation as to the size of the dredge?—There is no regulation wanted; if the oysters are caught in a dredge they must be thrown overboard, and that will replenish the ground.

2591. Do you go in a smack or a boat?—A small smack of 10 or 11 tons.

2592. Perhaps you have heard that the boatmen who use the 14 or 15 feet boat complain that your heavy dredges going under a press of sail break the cultch and do great damage to the brood?—I do not conceive that.

2593. Can you say it does not?—I think I can. The 14-feet boat uses as heavy a dredge as we do, and goes quite as rapid, and they heave the cultch over from that boat, whereas we spread it with care. I think the small boats do quite as much harm, if not more than the larger craft; we have used these harbours these 40 years, and have always used such craft.

2594. The fact is that your smacks hinder them from fishing as conveniently as they otherwise would?—I cannot conceive there is anything else.

2595. You do not conceive that your dredging does more harm than theirs?—I do not.

2596. Do you pay any tithe for oysters and other fish that you catch?—No tithe whatever.

2597. Are you employed in any other kind of fishing but oyster dredging?—Sometimes we go trawling and herring catching.

2598. Is there any grievance relating to the other fishing?—It is immaterial, we catch little or no fish.

2599. Is there any grievance arising from using stop-nets in the harbour?—The people who are employed in catching these fish feel it as a grievance, for it has always been considered that a stop-net is an unlawful net, for it destroys the brood of the fish. After the tide is gone the fish are trod into the mud and destroyed by catching the other fish.

2600. Is the oyster fishery at Portsmouth in a worse state now than when you first began fishing?—It is nothing now compared to what it was; formerly we made a good living by it.

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2601. Where did their smacks come from?—From the east country to purchase of the west-country people.

2602. Was it the practice for them to purchase oysters not less than two inches and a half, to lay down for the London market?—That is so.

2603. At that time was there the practice you now complain of, of carrying away the brood?—No such thing.

2604. In those days they were content to buy the oysters at a proper age and size, whereas now they take them away at an earlier age, when they are not fit for use?—Not the east-country people. Our own people, after the season is over, take them away and lay them on the lakes.

2605. Do they claim it as their own property?—They buy it of us.

2606. Is the lake their property or public property?—It is an arm of the sea; they have got leave from the Commissioner of Portsmouth harbour.

2607. Is there any of the brood fishing going on at this present time?—Yes.

2608. Who are carrying it on?—We should be, if we were not catching mackerel.

2609. Why should you be doing it?—Because we should have nothing else to do.

2610. But you know that it would be better for you if it was left?—We do.

2611. Are there any fishermen employed in catching the brood?—Yes, east-country people from Essex.

2612. There are now some Essex fishermen come down to dredge for the brood in order to sell it to the people in the neighbourhood, who make there oyster-beds?—That is correct.

2613. Do you, Maine, agree with what Challen has stated?—I do, perfectly.

2614. In the old mode of catching oysters, did the people have an abundant supply?—Yes, there was no coal to go to Jersey then.

2615. Have you any difficulty in obtaining licences for your fishing boats?—None whatever.

2616. Are you not limited to certain distances?—Yes, my distance runs from Dungeness to the Start Point, 12 leagues from the land.

2617. Would it not be a great benefit to you if it was not limited?—Yes, we should feel it a great benefit. We are sometimes obliged to go out of our limits for mackerel, and then the revenue cutter will board us and take us in, if we are out of our limits.

Mr. *Thomas Hammond*, called in; and Examined.

Mr. *T. Hammond.*

2618. YOU are engaged in the fishing trade at Yarmouth?—I am.

2619. How long have you been so engaged?—Twelve or fourteen years.

2620. What is the state of the fishing trade at Yarmouth now, with regard to the extent of it?—The number of boats is about 100 sail; but during the herring fishery we engage from Yorkshire between 40 and 50 sail; the average tonnage of these vessels is from 40 to 50 tons.

2621. What quantity of capital do you suppose is employed?—From 220,000*l.* to 250,000*l.*, taking the boats, the nets, the places where we cure the fish, and everything else into account; this includes the furnishing the Yorkshire boats with nets.

2622. What is the average expense of fitting out one of these boats for the season?—The expense is about 600*l.* or 700*l.*; we are obliged to find them about nine score nets during the voyage.

2623. What number of men are employed in the fishery at Yarmouth?—Between 4,000 and 5,000 directly; as to the indirect employment, I cannot give any account of it.

2624. What number of men are in each of these vessels?—Ten men and a boy.

2625. What wages do they receive?—They are paid by the last.

2626. What description of fishing are these vessels generally engaged in?—The herring in the autumn, and the mackerel in the summer season.

2627. About four months in the whole year?—Between four and five.

2628. Are they employed in other fishing at other seasons of the year?—We send them on the Scotch coast to fish for green herrings, and we cure them at Yarmouth.

2629. How far off the coast do you fish?—From 20 to 50 miles.

2630. And how far north and south?—Sometimes as high as the Foreland and as low as Cromer.

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2631. Do you ever fish near to the opposite coast?—Sometimes in sight of it.

2632. Is there any impediment to your fishing there?—I have never heard of any impediment; our fishing boats do not go so near the shore as those that go trawling.

2633. Is there any restriction to foreign vessels coming to fish on our coast?—I never heard of any; the Dutch fishing vessels often come and fish with ours, and so do the French.

2634. How near to the shore?—Within 20 or 15 miles; the Dutch vessels come nearer than the French.

2635. Do you say that your boats fish with drags?—We do not trawl; our nets are floating-nets, which drift with the boat. To give the Committee an idea of the extent of our mackerel fishery, one of our boats shoot 11 score nets; the extent of these nets when they are so shot, extend a mile and three quarters each in length.

2636. Will you state any grievance you have to complain of, or impediment in your fishing, or anything you wish to have altered?—In the first place, the duty that is levied on our herrings in the Neapolitan dominions is a very great injury to our export trade in fish.

2637. Is Naples your principal market?—The duty is so very heavy there, that it amounts to a prohibition; at Leghorn there is no duty; the freight is the same to Genoa, Leghorn and Naples; at Leghorn, the freight and charges on a barrel of herrings amount to 11 *s.* 4½ *d.*; at Genoa, 10 *s.* 4 *d.*

2638. What does a barrel contain?—About 800 or 900, according to the size of the fish.

2639. How many barrels are there to a last?—About 13 or 14. The duty at Naples is 16 *s.* a barrel, and the freight and commission 10 *s.* 3¾ *d.*; we have not exported any fish for the last two or three years.

2640. That used to be your great market?—If the duty was entirely taken off it would consume 10,000 or 12,000 barrels a year.

2641. Do you recollect when the advance of the duties in the Neapolitan states took place?—I do not. At Palermo the duty is 12 *s.*; the other charges are the same as at Naples. At Venice there is no duty, and the other charges there amount to 10 *s.* 6¾ *d.* At Trieste it is the same; Venice is the least expensive port in the Adriatic; there is a duty at Rome of 8 *s.* 6 *d.*, but that is not a government duty; I believe it is a municipal duty.

2642. Do you know that it is not a government duty of your own knowledge?—I have understood it is not.

2643. What do you consider a good catch from one of these vessels of 40 or 50 tons?—From 25 to 30 last we reckon a very good catch.

2644. The average value per last depends on what?—On the quantity got; there is the same expense as to curing of them, whether you get a lesser or a greater quantity, save and except the wages.

2645. There are very few fresh herrings sold?—Not very extensively.

2646. When does the mackerel season commence?—In May and finishes in July.

2647. This is principally a fresh market?—Always; it is a perishable article.

2648. What is your principal market?—We generally fish for the London market, except what we sell at home.

2649. It would be a great detriment to you, if you were prevented selling your mackerel on a Sunday?—It would completely annihilate the mackerel fishery. We have three distinct modes of catching mackerel: there are a certain number of boats that fish for our markets at home; they come into Yarmouth Roads every day, go to sea at night, and return the following morning; these fish are sold on the beach by auction. We have 20 or 30 sail that fish at sea; sometimes off the Foreland, sometimes off Orfordness and Yarmouth Roads: with these boats are a certain number of cutters, who when they get the fish on board proceed direct for Billingsgate.

2650. Do they come up all the way to Billingsgate?—They come direct from the vessels to Billingsgate; they bring the mackerel on our own account, and we give them a certain per-centage.

2651. Do these vessels belong to London tradesmen?—Some to London and some to Dover, as it may happen. Fish that are caught on a Friday morning, we think it a good chance if the cutter gets the Saturday afternoon's market at Billingsgate: should she miss that market and not be allowed to sell on Sunday, they would be all lost. A great many mackerel are caught at Yarmouth and sent to London by land-carriage. If they were prohibited on Sunday, the night's catch would

would be spoiled on the Saturday night; you could not fish at all, therefore there would be three nights in the week they could not fish. If the preamble of the Bill was anything like Sir Andrew Agnew's, that no vessel should proceed to sea on a Sunday under the burthen of 200 tons, I think the Committee will see it would completely annihilate our fishery altogether.

2652. Are you aware that there is a great trade going on between the foreigners and the carrying vessels?—In the mackerel season there are a great many mackerel purchased by our cutters off the Foreland, out of the French boats, which of course is a great detriment, by coming in competition with our fish at Billingsgate.

2653. Do you conceive that is carried on to a great extent?—I do.

2654. Do you not consider it of such importance that you hired a vessel of your own to protect your own fishery?—Yes; Lieutenant O'Neill was employed to prevent two English cutters buying the mackerel out of the French boats.

2655. Did not the Custom-house take any steps to prevent this contraband trade?—Not the least.

2656. Do you think, under the present law, it is impossible to prevent it?—If one of the Custom-house vessels cruised for the purpose, it would in a great measure stop the trade.

2657. When you had a vessel there, was it prevented?—Yes, it was.

2658. Why is it our people purchase mackerel from the French boats, when they may equally purchase from our boats?—No doubt they can purchase them at a cheaper rate, or perhaps that very morning there is not a sufficient supply from our own boats.

2659. Supposing the French boats were prevented from coming, would their places be supplied by English fishermen?—No question about it.

2660. The carrier vessels will buy of the English vessels as well as of the French?—Certainly they will, it all depends upon the catch.

2661. You think it would be a very great benefit to prevent this contraband trade in the herring and mackerel?—Most unquestionably.

2662. Are you of opinion that it is practicable, considering that at Dover they have attempted it and failed?—If there was a vessel for the express purpose during the six or seven weeks these boats are fishing off the Foreland, I have no doubt whatever it would be done away with, if not entirely, to a very great extent.

2663. At the time a vessel was stationed for that purpose, did you feel a benefit from the interference?—Certainly, and the masters of the fishing vessels were perfectly satisfied.

2664. Have you any fishery for turbot or cod?—No regular fishery.

2665. Have you no boats out of Yarmouth that go on the Dutch coast?—No, we have no trawlers that go out of Yarmouth; men come off our coast from Torbay.

2666. Could not your people be employed at that time?—Our fishermen are of a different description, and our vessels are luggers. In the trawling vessels the men have been brought up as fishermen; our men are agricultural labourers from the adjacent villages, men that can pull and haul.

2667. If they have a good season, do not they make a great deal of money?—Yes; according to the number of lasts of herrings they get in a season so they are paid.

2668. Have you not fishermen that could be employed in dragging or trawling?—Some of them, after the herring season, go stow-boating for sprats.

2669. Are the foreign vessels that fish for herring and mackerel about the same size as the English vessels?—The French vessels are larger; some of them 100 tons, carrying from 25 to 30 men.

2670. Is there a greater proportion of English or foreign vessels during the season?—I should think the greater number are French vessels.

2671. How far north do the French vessels go?—As far as the Duggin, off Wales.

2672. You are aware the foreigners are allowed to sell turbot in our market?—I am.

2673. Any alteration in that law would not affect the Yarmouth fishery?—No, unless our fishermen were allowed to go there and sell herrings.

2674. You would wish to have some description of our fish imported into foreign countries?—Certainly.

2675. If herrings were allowed to be sold in Holland, should you find a ready market?—I think it would be a great benefit to our fishery.

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2676. You think that the sale of foreign turbot should be prohibited here?—It would give greater encouragement to our own fishery.

2677. Supposing foreigners were prohibited from importing turbot, would any vessels from Yarmouth be employed in that fishery?—I think they would try it.

2678. Are you aware that in the event of any Dutch or French fishing vessels being driven into Yarmouth from distress, that they are permitted to sell in the streets sufficient fish to supply themselves with provisions during the time they stay there?—I should think they would not be prohibited.

2679. Does it frequently occur?—Not of late years; formerly we had what is called a Dutch fair, at which the Dutch vessels used to sell their fish and other things.

2680. What distance can you fish within the French coast?—I have never heard of our boats being molested in fishing on the French coast; they often fish within sight of land, off the coast of Holland.

2681. Do your fishermen pay dues to the Greenwich Hospital?—We pay what is called the sixpenny duty; 6 *d.* per head per month for every man on board each boat; we have paid that for upwards of 20 years, and consider we are paying it unjustly, inasmuch as we and Lowestoft are the only places that pay it. The vessels we engage from Yorkshire never pay it at Scarborough or Whitby, but when they come to Yarmouth to fish for us they will not allow them to return without paying this Greenwich money.

2682. Who compels it?—The comptroller of His Majesty's customs collects the money, for which he gets a large per-centage. I have sent my boats down without paying it, to go to sea, and the instant they get to the harbour's mouth, he says, "Do not allow any fishing-boat to go to sea until the Greenwich money is paid."

2683. Have you ever known a vessel prevented going to sea?—Yes, many; and I have known the comptroller to put out a public handbill about the town, stating that no boats will be allowed to go to sea until the Greenwich money was paid.

2684. What is his name?—John Preston.

2685. How long can you speak to this being done?—He has been the comptroller these seven or eight years. I do not remember who collected the Greenwich money before him.

2686. Was it collected before his time?—Yes, certainly.

2687. Is it collected under Act of Parliament?—I suppose it is from the Greenwich Hospital Board.

2688. You say that the crews of your vessels are composed of agricultural labourers; do you mean 6 *d.* a head is paid for each of these persons that go on board?—Most certainly.

2689. How long are your boats at sea?—Some six or eight weeks.

2690. Do you know any instance of these people deriving benefit in after life from Greenwich Hospital?—Not any.

2691. Do you pay tithe on fish?—Yes.

2692. On what description of fish?—Both herring and mackerel.

2693. How is it collected?—In the herring season the clergyman values the herrings at so much per last, according to the number of lasts.

2694. How are they valued?—He has some one to collect the tithe, and they go round and ascertain the number of lasts each boat has caught; they value them at so much per last, and deduct a certain proportion for the boat's expense, and then it is divided into about 80 shares, and he takes one share.

2695. If you catch it and send it in a carrying vessel to London, do you pay a tithe on that?—Certainly.

2696. As long as you remember, that has prevailed?—It has.

2697. Is it an old custom?—A very old custom.

2698. Do the Yorkshire boats pay the same?—They pay nothing.

2699. The amount of the tithe is not very large?—It is not very large.

2700. What is the extent per annum?—Between 2 *l.* and 3 *l.* each boat.

2701. Who is the clergyman that receives it?—The rector of the parish.

2702. Is there only one parish in Yarmouth?—Only one.

2703. Has not the fishery within a short period experienced a considerable distress?—Yes.

2704. To what do you impute that?—Until within the last few years we had a bounty on all fish exported, which was a great relief to the fishery; that is now taken away. Hemp and other articles are much cheaper than they were, and our property has partaken of that depression which all other property has.

2705. You

2705. You do not complain of the duty being taken off hemp?—No, it is a great benefit to us. Mr. *T. Hammond.*

2706. There have been a great many failures and considerable property disposed of at great depreciation?—There have. 5 July 1833.

2707. Is there anything else you could propose for your benefit?—Our fish are prohibited from going into Spain and Portugal. About three or four years since the port of Cadiz was free for a short time; we exported a few cargoes to Cadiz, and they paid us exceedingly well. Had it continued open, I have no doubt it would have been a port of very considerable consumption.

2708. Are you aware that before the port of Cadiz was made a free port, attempts had been made to introduce smuggled fish into Spain?—There have been instances of smuggled fish being sold there, which has answered very well.

2709. What is the highest amount of capital that has been employed in the fishing trade?—It was stated before the last Committee that half a million was employed.

2710. What Committee do you refer to?—To a Committee sitting on the salt duty.

2711. Do you recollect there ever being a larger number of boats than there are at present?—I do not think the number of boats has decreased.

2712. Do you think your cured herrings would be acceptable in the French and Belgian ports?—I should think so, unquestionably.

2713. Are you allowed to import into the French or Dutch markets?—No.

2714. Into Belgium?—Yes, since the dispute between Holland and Belgium.

2715. Have you tried the West India market with the pickled herring?—Ours is not a pickled-herring fishery, but a red-herring fishery.

2716. Have you sent these cured herrings to the East India market?—Never direct from Yarmouth.

2717. Do you supply any to Ireland for consumption?—No.

2718. Have you any considerable home market for herrings?—Yes, Yorkshire, Liverpool and Lancashire.

2719. Is there anything that occurs to you that would improve the condition of your herring fishery?—The taking off the duty off herrings in the Neapolitan dominions would be a very great relief.

2720. Do you think it would be necessary, in case of any commercial negotiations between Belgium and this country, that care should be taken of the fishing interest?—No doubt it would be a great benefit. I have reason to believe that lately there has been a reduction of the duty in this country on certain articles of Neapolitan produce, barilla and sulphur, without a corresponding reduction on their part.

2721. Have you made any application to the Board of Trade on the subject?—We have made repeated applications to the Board of Trade on the subject for the last five or six years.

Mr. *Benjamin Brown*, Examined.

2722. WHERE do you come from?—From Lowestoft. Mr. *Benj. Brown.*

2723. What distance is that from Yarmouth?—Nine miles.

2724. Are you a fisherman?—Not a practical fisherman; only a fish-curer.

2725. How many years have you been a fish-curer?—Twenty years.

2726. Have you heard the evidence of the last witness?—I have.

2727. Are you practically acquainted with the subjects on which he has been examined?—The principal subjects.

2728. Do you concur with him in opinion on the facts which you have heard him state?—I do.

2729. Entirely?—Nearly so. As to the Greenwich money, the reasons that have been assigned when we petitioned to have it taken off, were these: they said we were not bringing a fresh fish into the market like other fishermen, but that ours was cured fish; therefore they charged us with it, taking it in the nature of cargo. Our men cure the fish immediately it is caught, on board of the boats. There are about 70 boats of 40 tons each, employed in fishing at Lowestoft.

2730. From what Board did you receive that answer?—That was from the Board of Trade, about five or six years ago.

2731. What is the greatest extent of time that one of these vessels remain at sea?—They are never at sea above 14 days.

Mr. *Benj. Brown.*

5 July 1833.

2732. Do you pay tithe?—Yes; our tithe is fixed by a terrier.

2733. Is that a custom time out of mind?—Yes, it is.

2734. Have you any other fishing at Lowestoft besides the herring and mackerel?—Notl.ing, except with the small boats on the beach.

2735. On your part of the coast is there any stow-boat fishing?—There is.

2736. How many boats are there employed?—From 150 to 200.

2737. Of what size?—Some are small open boats, and some are 50 tons.

2738. What do they mostly catch?—Sprats and small herrings.

2739. Does that or not materially tend to decrease the breed of fish?—That is the general opinion.

2740. Has there been a scarcity of fish of late?—In our bays there formerly used to be a great many soles, now we have none.

2741. Do you apprehend that the stow-boat system has occasioned this?—That is the general opinion; we had a number of families who went on the coast dredging, and that is entirely done away: they attribute that to the breed of fish having been destroyed on the banks.

2742. Has the stow-boat system materially injured the fishing?—It is considered to have done so.

2743. Is their fishery at an end?—Nearly so.

2744. Can you point out any season in which this system is more prejudicial than any other?—In December and the following months.

2745. If it was prohibited in those months, would the injury be still very considerable?—The longer it was discontinued the fish would be getting larger, and getting into deeper water.

Mr. *William Woods*, called in; and Examined.

Mr. *William Woods.*

2746. WHAT are you?—A fish salesman in London, during the mackerel season, and a fish-curer at Lowestoft.

2747. Have you been engaged in the herring and mackerel fishery many years?—Yes, for 30 years.

2748. When you used to go to sea, did many foreign vessels fish in company with you?—Always in the mackerel season more than in the herring.

2749. Are they as numerous as the English vessels?—More numerous.

2750. You know that the purchase of fish from these vessels often takes place?—I have seen it frequently.

2751. Were you aware that it was unlawful?—Yes.

2752. Did you make no complaint about it?—We have made complaints. There are a vast number of French boats from Graveling, Boulogne and Dieppe, Calais and Caux, which are frequently on our shores selling to such boats as are disposed to buy.

2753. What description of boats purchase of these vessels?—Some of the Gravesend and London hatch-boats; Dover and Kentish cutters.

2754. Do you remember when a vessel was hired by the fishermen to try and protect their trade?—I was at sea at the time, and it had some effect; it was a sort of threat held out. If we had had a first-rate vessel and more men it would have had a better effect.

2755. I suppose it is very easily detected?—I have seen the French take the money as familiarly from the cutter-masters as if they were paying it to me. I once saw 4,000 mackerel paid for by a Kentish buyer to a Frenchman.

2756. Do they pay money or goods?—Always in money.

2757. You say that it is illegal to purchase fish from a foreign vessel; supposing you made a complaint to a revenue cruiser, I apprehend the cruiser would have the power to keep the ships at sea?—We have proof of the fish being bought; the question is to prove their being brought to the market. Two revenue cutters would effectually prevent it, by having a man experienced in the business on board of each.

2758. Would you say, on an average, that one-third of the fish brought to our market is purchased from French vessels?—I should say that is so.

2759. What effect has this trade on the price of fish in the London market?—In some measure it makes fish cheaper. The complaint is, that they occupy the same ground that our fishing vessels want to fish on.

2760. If they were prevented fishing, would their place be supplied by English fishermen?—No doubt of it. In the early part of May our boats began for mackerel,

mackerel, and they went to the same grounds where the French were fishing, but between the land and where they were fishing the space was so narrow that it would not admit of the French and our boats fishing together; the consequence was, that our boats were obliged to go below Yarmouth; and up to the present time, I engage to say, the men on board those vesssels have not earned 5*s.* a week. Mr. *William Woods.* 5 July 1833.

2761. What do you think the men would have earned had not the French been there?—I think from 18*s.* to 20*s.* a week.

2762. Supposing the French were shut out from our market, would it be worth their while to come there and fish?—They would not come; they would be too far from their own market.

2763. Do you believe that the French craft come over expressly for the purpose of supplying the British market?—I have no doubt of it.

2764. The English market is better for the sale of fish than the opposite side?—Otherwise they would not come on this side.

2765. Do you think that it would be very detrimental to the mackerel fishing supposing it was prevented being sold in London on a Sunday?—No doubt of it. I perfectly agree with what has been said on this subject; last year we were under the necessity of heaving 50,000 mackerel away. I am now speaking of the London market.

2766. Do you ever sell mackerel for manure?—Never

2767. Can you state to what proportion the fish in the London market is lowered in consequence of this trade?—I cannot say; we are starving our own people by allowing them to bring this fish to market.

2768. You think it is increasing every year?—It has been increasing every year.

2769. Which are the largest vessels?—The French vary very much in size; there are many small boats at Graveling, &c., but when you get further into the Channel they are larger.

Mr. *John Pearce,* called in; and Examined.

2770. WHERE do you reside?—At Mevagissey, in Cornwall. Mr. *John Pearce.*

2771. You are acquainted with the pilchard fishery, I believe?—I am.

2772. Does your knowledge extend over a great part of the coast?—I know the whole of the coast of Cornwall.

2773. The greater part of the pilchards are caught in seines, are they not?—Yes.

2774. Can you at all state the proportion caught in seines, compared with those caught in the driving-boats?—The quantity caught with the driving-nets never exceeded 3,000 hogsheads exported; the quantity taken in seines have averaged at 25,000 to 30,000 hogsheads, and has been known to amount to 50,000.

2775. Are you speaking of your own bay or the coast of Cornwall generally?—The whole county.

2776. Assuming that the quantity of fish is in the proportion of ten to one, is the capital employed in the same proportion?—In a far larger proportion as respects the seines; I should think 15 or 20 to one.

2777. Is the fish caught in the driving-nets in as fit a state for curing as that caught in the seines?—They are cured, but are not considered so good.

2778. Do you imagine that driving-nets injure the seine fishing?—We think they do essentially injure it; the seine fishing has fallen off considerably of late years; the driving-boats prevent the fish coming into the shore.

2779. What evidence have you of that?—Immediately the fish strike against the drift-net they turn off to sea instead of coming inwards.

2780. Do you imagine the number of drift-nets has increased?—Very much on our coast.

2781. Has the general prosperity of the fishing declined in the same proportion?—The bay fishery has fallen off entirely.

2782. Are the drift-nets equally injurious at all periods of the season?—So long as the fish keep in deep water the drift-nets do no injury.

2783. What is the difference of season between the two kinds of fishing?—The fish are taken by the drift-nets in July, but are seldom taken by the seines earlier than in August.

2784. If there was any restriction on the drift fishing, for what period of the year should it last?—From the 1st of August to the 15th of September; about six weeks.

Mr. *John Pearce.*

5 July 1833.

2785. It is not till they approach the shore that they can be caught in the seine?—Not till they are within 14 fathoms of the shore.

2786. In consequence of the decline of the fishery, are many persons preparing to withdraw their capital?—Many; I only wait a favourable opportunity to withdraw mine.

2787. Does there exist any enactment at present preventing the use of these drift-nets at the season you think they ought to be restricted?—The Act of Charles prohibits their coming within 4 ½ miles of the headlands.

2788. If they were prevented driving within that distance, would that prevent the injury?—Decidedly prevent all injury to us; if they come across the bay, there they do the injury.

2789. You wish to protect the whole of the bay from headland to headland?—Exactly so. The fish seldom draw towards the shore until the first week in August; while they are in deep water the drift-nets do us no injury.

2790. Is there any penalty for this?—The penalty is imprisonment, and forfeiture of the nets.

2791. Do you know of any instance wherein the penalty has been enforced?—Yes, two or three instances.

2792. Is the Act sufficient for the purpose?—The difficulty with us at present is the expense of enforcing the Act; we are obliged to take every case to quarter sessions; besides this, the seine proprietors are obliged to have a boat manned with a great many men to keep the drift-boats at a proper distance from the shore.

2793. Do you think that your not being able to prosecute them from the great expense, leads to the committing a breach of the law?—If the law was more summary, I think the seine proprietors would take more notice of it than they do.

2794. How would you remedy it?—By making the punishment more summary, or by Government stationing a vessel on the coast.

2795. You imagine that the proper remedy would be giving a summary conviction before a magistrate?—That would be a great protection to us.

2796. But protection by a Government cruizer would also be of great avail?—Yes; I have no hesitation in giving it as my opinion that the revenue cutters stationed on the coast would be able to perform the duty.

2797. A protection for six weeks would be sufficient to protect the interests of your trade?—Yes; if the revenue cutters were authorized to take these boats, that would be found an effectual protection.

APPENDIX.

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APPENDIX.

Appendix, No. 1.

Appendix, No. 1.

Several Petitions referred to the Committee.

THE several Petitions from Emsworth, Brixham, Havant, Langstone, Bedhampton and Farlington, referred to the Committee.

The humble PETITION of the Inhabitants of *Emsworth*, in the Parish of *Warblington* and County of *Southampton*,

Respectfully showeth,

THAT the harbour of Emsworth is peculiarly favourable for the production of all kinds of sea and shell fish; but for oysters, both as to abundance and flavour, it has long possessed the highest celebrity.

That within the memory of many of your petitioners, large quantities of oysters were annually exported from this place, the fishermen were a numerous body of men, their calling was considered respectable, they were accustomed to receive apprentices, and usually contributed to the parish rates; whereas at the present time their number is considerably diminished, many of them can scarcely obtain a livelihood, and consequently the majority are dependent on parochial bounty.

That this lamentable change has been occasioned either by the violation of rights established by local custom, the infraction of the laws relating to fisheries in general, or from the want of sufficient protection to a locality offering pre-eminent advantages for the production of all kinds of fish.

That at the present time are caught, to the ultimate ruin of the fishery and the prejudice of the country at large, great quantities of the young brood of different kinds of fish, but particularly base and mullet; they are so small that they are offered for sale at 2 *d.* and 3 *d.* per dozen retail, and this enormous abuse causes a privation in the general market of a regular supply of good fish of a proper size; the same remark, as to the abuse itself, applies in a stronger degree, if possible, to the present state of the oyster fishery.

That your petitioners therefore most humbly pray your honourable House will be pleased to take into their consideration the state of the fisheries in the harbour of Emsworth, in order to the restitution of their privileges and rights, and their establishment on a permanent basis, as well as for the future encouragement of procuring fish, and particularly oysters, for consumption and exportation.

The humble PETITION of the Owners of Fishing Sloops and Boats belonging to *Brixham, Torbay*, in the County of *Devon*, and others, the Inhabitants of *Brixham*,

Showeth,

THAT the public wealth, honour and safety of this kingdom, as well as the maintenance of trade and support of navigation, as in many other respects, depend greatly on the improvement and encouragement of the British fishery.

That the free admission of foreign fish into the British market, more particularly from the coast of Holland, is productive of the greatest injury and loss to the British fishermen, inasmuch as during a great portion of the year it prevents the employment of a number of vessels, whose crews are rendered indigent by being thrown out of work, and thereby destroying the support and assistance which otherwise would be afforded to navigation, and to the British fishery in general.

That, independently of the injury sustained by the British owners, heavy burthens are imposed on the parishes of the different fishery ports, occasioned by want of employment, hundreds of the fishermen becoming with their families paupers.

That the prohibiting the admission of foreign fish would not cause any deficiency of supply, or tend to increase the price, inasmuch as the number of vessels employed in the British fishery are fully capable to supply a quantity more than adequate to the demand. The Torbay fishery claims to itself, as being (with all due deference to others) the most ancient fishery in the kingdom, and now, without exaggeration, it may be called the largest, having supplied the metropolis for the last hundred years, and having upwards of 100 sail of fishing-smacks, exclusive of about 80 sail of stout boats, or yawls; and regularly every year, in the season, upwards of 50 sail of its vessels go to Ramsgate, Dover, &c. for the purpose of fishing.

Your petitioners therefore most humbly pray that your honourable House will take their case into consideration, and grant them such relief in the premises as to your honourable House may seem expedient, and, as in duty bound, they will ever pray.

Appendix, No. 1.

Several Petitions referred to the Committee.

The humble PETITION of the Inhabitants of *Havant, Langstone, Bedhampton,* and *Farlington,*

Showeth,

THAT the harbour of Langstone is peculiarly favourable for the production of fish.

That of late years the fishing has been seriously injured by the base, mullet, and other fish being taken by nets with too fine a mesh, and by a premature destruction, preventing their maturity and depriving the neighbourhood of a supply of good-sized marketable fish, large quantities having been offered for sale in the present season not exceeding six inches in length.

That an industrious set of fishermen have immemorially been employed during the fishing seasons in catching oysters, not only for the neighbouring consumption but for distant markets, for which smacks were at stated periods sent to load.

That a sense of their own interest deterred the fishermen from a sale of undersized oysters, but that of late years the smacks themselves have entered the harbour furnished with powerful drags, indiscriminately catching both large and small, not even excepting the brood; in short, taking all fish that came to net.

That the fishermen who were formerly enabled to support, and felt a conscious pride in maintaining, their families by industrious labour, have been compelled to resort to parochial aid.

Your petitioners therefore humbly pray that your honourable House will take the condition of this fishery into your serious consideration, and by extending your protection thereto, relieve the wants of an industrious body of men, and insure an ample supply of fish to the neighbourhood; and your petitioners will, as in duty bound, pray.

Appendix, No. 2.

Appendix, No. 2.

Petitions from Hastings and Lowestoff.

PETITIONS from *Hastings* and *Lowestoff* to the Right Honourable the Board of Trade.

The humble PETITION of the undersigned, being Fishermen and persons engaged in the Fishing Trade of the Town and Port of *Hastings*, in the County of *Sussex*,

Showeth,

THAT by Statute 15 Cha. 2, c. 7, intituled, "An Act for the Encouragement of Trade," it was amongst other things enacted, for the encouragement of the herring and North Sea, Island and Westmony fisheries, that from and after a certain period therein appointed, no fresh herring, fresh cod or haddock, coal-fish or gull-fish, should be imported into England, Wales, or the town of Berwick, but in English-built ships or vessels, or in ships or vessels *bonâ fide* belonging to England, Wales, or the town of Berwick, and having such certificate thereof as abovesaid, and whereof the master and three-fourths at least of the mariners should be English, and which had been fished, caught and taken in such ships or vessels, and so navigated, and not having been bought or had of any strangers born, or out of any strangers' bottoms, under the pain of the forfeiture of all such fish, and of the ship or vessel in which it should be imported; one moiety thereof to the King, the other to the informer; to be recovered by bill, plaint or other action.

That by the Statute 18 Cha. 2, intituled, "An Act against Importing Cattle from Ireland, and other parts beyond the Seas, and Fish taken by Foreigners," it was enacted, for the better encouragement of the fishing of this kingdom, that if ling, herring and certain other fish, taken by foreigners, aliens to this kingdom, should be imported, uttered, sold or exposed to sale within this kingdom, it should be lawful for any person to seize and dispose of the same, and to apply the produce in manner appointed by the said Act.

That by Statute 1, Geo. 1, c. 18, intituled, "An Act for the better preventing Fresh Fish taken by Foreigners being imported into this Kingdom, and for the preservation of the Fry of Fish, and for other purposes," after reciting, that notwithstanding the many good laws made for the preservation and improvement of the fishery in that part of this kingdom called England, (particularly the Acts of Parliament above referred to,) and reciting that many evasions had of late years been invented and practised, whereby that useful design had been very much obstructed, and more especially by the fraudulent practices of divers persons trading in English smacks and other vessels, who, when they were off at sea, bought great quantities of fish caught by foreigners, and imported and marketed the same in this kingdom, to the great discouragement and impoverishment of His Majesty's subjects, and manifest detriment of the fishing and navigation; for remedy thereof it was enacted, that from and after the 29th day of September 1715, no herring, cod, pilchards, salmon or ling, fresh or salted, dried or bloated, nor any grill, mackerel, whiting, haddock, sprats, coal-fish, gull-fish, congers, nor any other sort of flat fish, nor any other sort of fresh fish whatsoever, should be imported into, sold, or exposed to sale, in that part of this kingdom called England, which should have been taken by, bought of, or received from any foreigner or foreigners, or out of any stranger or strangers' bottom, except Protestant strangers inhabiting within this kingdom, nor should any person or persons give or exchange any goods or other things in exchange for any sort of fish so taken as aforesaid. And it was by the said Act further enacted, that every master or commander of any smack, hoy, yager, boat, ship or other vessel, in which any fish should be imported or brought to shore, contrary to the true intent and meaning of the said Act, should forfeit for every such offence the sum of 20 *l.*, to be recovered in a summary manner, before one or more justice or justices, and in default of payment thereof should be committed to the common gaol, to suffer imprisonment during the space of 12 months.

That

Appendix, No. 2.

Petitions from Hastings and Lowestoff.

That by Statute 9 Geo. 2, c. 33, intituled, "An Act to render the Law more effectual for preventing the Importation of Fresh Fish taken by Foreigners, and for other purposes," after reciting the said Act 1 Geo. 1, and that the penalties inflicted thereby were not sufficient to deter persons from offending against the same, and that by reason of the short time limited for the prosecution of offences committed against the said Act many offenders escaped punishment, it was by the now reciting Act enacted, that from and after the 24th day of June 1736, every person offending against the said Act thereinbefore recited should forfeit and pay the sum of 100 *l.*, to be recovered by any informer in any of the courts of Westminster Hall, and to be distributed and disposed of in the manner therein mentioned, viz. one moiety thereof to the informer, and the other to the poor of the parish where such offence should have been committed; and the master or commander of every smack, hoy, yager, boat, ship or other vessel in which any fish should be imported or brought to shore, contrary to the true intent and meaning of the said Act thereinbefore recited, and the now reciting Act, should forfeit and pay the sum of 50 *l.*, to be recovered by any informer, and to be disposed of in manner thereinbefore recited.

That notwithstanding the foregoing Acts of Parliament, your petitioners are still grievously injured by the free importation of fish caught by foreigners; that offences against the said Acts are continually committed by the masters of many of the London, Gravesend, Thames, and other smacks and vessels who act as purveyors to the London market, and purchase at sea the produce of foreign boats; indeed so general is this practice become, that French boats are now numerously employed on the English coast, and fish, without hinderance or limit, wherever it suits their purpose.

That your petitioners, though at all times sufferers from the uninterrupted trading of the French, are particularly so in the herring and mackerel seasons.

That in the herring season the French boats take up their station off the North Foreland and on the other fishing grounds of the English, and compete with them for the supply of their own markets; with this advantage, that when the English market is low they can resort to their own.

That when the wind is against the French boats returning home, their crews, sooner than lose a market, will sell their fish at almost any price, to the great deterioration of the market price to your petitioners.

That your petitioners have also to complain of the great loss and damage which they frequently sustain by the spiteful conduct of the French fishermen, in wilfully sailing through and injuring and destroying their nets; that they will sometimes take the fish out of their nets, and have been known even to steal the nets themselves when completely cut adrift from the boats.

That the French boats are so much larger and more numerously manned than the English, that the latter cannot protect themselves against the aggressions of the French fishermen, who have the entire dominion of the Channel.

That the French have since the peace been gradually encroaching on the rights of the English fishermen, from which, and the severity of many of the restrictions on the English, and their total want of protection against French competition, the fishery of your petitioners has since that time been gradually decreasing; that some 15 or 20 years ago the number of boats belonging to Hastings employed in the fishery amounted to upwards of 100, that now it does not exceed 60; that at the former period 50 boats were commonly employed in the herring and mackerel seasons, that now the number employed does not in the herring season exceed 20, and in the mackerel 40 boats.

That the boats of your petitioners being open boats, they are by the Custom laws confined to fish within certain limits of the coast of Great Britain, under penalty of their licence-bond and the loss of their boats; that these limits are too circumscribed, and your petitioners are frequently compelled by necessity to break them, as the general and most productive fishing ground is situate without the same.

That your petitioners are of opinion that those limits should be extended so as to allow them a facility of fishing without incurring risk.

That some bounds should be set within which the French should not be permitted to fish on or adjacent to the English coast.

That the revenue cruisers might be advantageously employed in protecting your petitioners from the aggressions of the French, in preventing them from fishing on English ground, and supplying the English market, as they do at present, without in any manner obstructing them in the performance of their general duties.

That the English fishery, under proper protection and regulation, is fully adequate to the supply of the English market.

That whilst the French are permitted to fish without restraint or limit on the English coast, English vessels are restricted from fishing within a certain distance of the French coast, and when driven into French harbours are not permitted to sell their cargoes, except for necessaries and repairs.

That your petitioners are inclined to lay their grievances before your right honourable Board, in the hope of some redress.

Your petitioners therefore most humbly pray that your right honourable Board will be pleased to take their petition into your most serious consideration, and to grant them such protection and relief as to your wisdom and justice may seem meet; and your petitioners will ever pray.

A similar Petition from *Lowestoff*, &c.

Appendix, No. 3.

Appendix, No. 3.

Mr. S. Miller to J. Halcomb, Esq. M.P.

Extract LETTER from Mr. *S. Miller* to *J. Halcomb*, Esq. M. P.

My Dear Sir, Dover, 29 April 1833.

THE disadvantage which our fishing trade has for several years past felt is, as I understand, the scarcity of fish; and this is accounted for by some to the practice of vessels being employed in fishing for sprats for manure, so small a meshed net being used as not only to catch the sprat, but every smaller species, consisting of the spawn of various fish. If this could be proved to be the consequence, then a penalty might be levied upon all fishermen and others using a net of less than a certain sized mesh. Others attribute the disappearance of the fish from this coast to other causes. But be the cause what it may, the quantity of fish in these seas is nothing to what it was formerly, and the prevailing opinion is, that in fishing for sprats for manure the spawn of every other description is destroyed.

Our fishermen experience great annoyance and loss of their netting in the mackerel and herring fishing from the French boats, which being much superior in number, as well as size, and from carrying a vast number of hands, often take advantage of this superiority and haul our fishermen's nets, or do them some other damage, while ours have no means of redress. I believe the Folkestone fishermen have more than once laid this grievance before Sir Edward Knatchbull and Mr. Marjoribanks, for them to endeavour to obtain redress; and if you think proper, and had an opportunity, you might mention the subject to these gentlemen, to ascertain what steps had been taken by them.

Another disadvantage resulting to our fishermen is that of restricting their boats to a certain distance in their pursuits. By the 6 Geo. 4, c. 108, s. 21, &c. vessels and boats are required to be licensed; that is, for the owners to enter into bond, in full value of their boat, that if detected in smuggling, or without the limits allowed, the penalty would be inflicted. The 27th section gives power to the Commissioners of Customs to restrict the limits to any distance from our coast, and the usual distance granted is three or four leagues. Now, our oyster fishing-boats are very materially inconvenienced by this restriction, because the beds being beyond the four leagues, or 12 miles distant, (say between five and six leagues, near to Boulogne) subject their boats and the penalty of the licence-bonds to forfeiture if they venture to their object. It is true some of the oyster-boats have, by petitioning the Custom's Board, obtained a licence for six leagues distance; but others cannot obtain this indulgence, because they are (the owners or masters) reported as suspected of smuggling. No other boats are allowed by law to go into foreign ports; but I think if you take bond tha a boat shall not be improperly employed, there can be no reason why she should not be allowed to go within one league of the French and Dutch coasts, from one certain place to another in extent.

The French fishing-boats may come as near to our shore as they please, being neither restricted by their own, nor debarred their privilege by our Government. They have the means of smuggling, and are oftentimes hired for smuggling, but they are under no bond; and why should not our boats, the owners of which give bond, have a privilege of going upon the French coast, sanctioned by Government? for, besides the loss of their boat and goods, suppose them to be smugglers, they would subject themselves to the penalty of a bond. I think this also has been represented to Sir Edward Knatchbull or Mr. Marjoribanks.

If I can afford you any further information upon the subject, I will with pleasure.

Yours, &c.
S. Miller.

Appendix, No. 4.

Appendix, No. 4.

Mr. J. Peake to J. Halcomb, Esq. M.P.

LETTER from Mr. *James Peake*, Secretary to the Dover Fishing Association, to *J. Halcomb*, Esq. M. P.

Sir, Dover Gas Station, 1 May 1833.

IN answer to your letter of the 25th ultimo to Mr. Foreman, respecting the fishermen, I beg to state that I am authorized by a body of the owners and masters of several fishing vessels sailing from this port (who met last evening at the Seven Stars) to acquaint you of the difficulties and grievances under which they at present labour, and to pray of you to take such steps to endeavour to remove such difficulties, that their condition may be benefited.

For some time past the fishing interests have been reduced to a very low state, in consequence it is supposed by many innovations made by the French fishermen on our coast. It appears that during the herring and mackerel seasons our fishermen are much prevented in their occupation in consequence of the numerous French fishermen throwing their nets in our bays, so much so, as to entirely prevent our boats from fishing during the night-time; it occasionally happens that they come in such numbers as altogether to take possession of our bays, to the very great annoyance, and indeed to the distressing injury, of our fishermen. This is an evil much complained of, and it would better their condition materially provided anything could be done to prevent their fishing within a certain distance

distance of our coast. It appears from the fishermen, that if our boats go within nine miles of the French coast they have boats, authorized by the French Government, to seize the nets, and to cause the masters to be imprisoned for some period, and also to be fined; and after the boats were removed even 13 miles from the coast they were prevented from fishing. Another grievance they complain of is, that it is a serious injury to their interests that fishermen of other countries are allowed to sell their turbots in our markets, at the same time the English are prohibited from selling their fish on the other side. Another circumstance of annoyance is, that dead fish, in large quantities, are often brought to this port by foreigners, and allowed to be sold; they think the law prevents it to be done. I have stated their complaints to you as I collected them from the meeting last night, not being acquainted in the least with the existing laws relative to fishermen; no doubt but the law already provides against many of their troubles. I now leave their case in your hands, being fully persuaded that you will do everything that can be done to promote their interests, and make them in a more flourishing state than they are in at present. They are a hard-working and deserving set of men, and well worthy the consideration of the Government to relieve their complaints.

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Mr. J. Peake to J. Halcomb, Esq. M. P.

I remain, &c.

James Peake.

Appendix, No. 5.

LETTER from *James Cornish*, Esq., to *J. Halcomb*, Esq., M. P.

Appendix, No. 5.

Letter from J. Cornish, Esq., to J. Halcomb, Esq. M. P.

Sir, Blackhall, near Totnes, 8 May 1833.

I SEE by the papers that you are about to take some steps relating to the fisheries, but I do not know what fisheries are meant to be the subject of the inquiry, whether the foreign, the Channel, or the salmon fisheries. If the former, I know nothing about them, but if the latter, or either of them, I believe I can give you as much information as any one, as both have been the subject of my attention for many years past: and with regard to the inefficiency of the present laws respecting the Channel fisheries, which are nearly ruined by the abuses practised on them, I believe I can state to you facts which will excite your astonishment, and which are the sole cause of the dearness and scarcity of the best Channel fish.

I had written a tract on this subject, with a view to publication, in order to draw the attention of the Legislature to them, and it will give me great pleasure to answer any question that you may require to elucidate them, either as to the Channel or salmon fisheries, if you think it worth while.

I am, &c.

James Cornish.

Appendix, No. 6.

EXTRACT from a Manuscript Treatise on ZOOLOGY, so far as relates to the State of the British Channel Fisheries, by *James Cornish*, Esq., and by him transmitted to the Chairman.

Appendix, No. 6.

Extract Treatise on Zoology, by J. Cornish, Esq.

IN a treatise on Zoology I do not know that a subject of this sort, strictly speaking, belongs to this work, nor do I know that it does not, as it is in some way connected with living animals; however, there is no law which precludes me from discussing it if I choose, and as I think it is likely to promote the interest of the community, I will at any rate strain a point, and avail myself of this opportunity of publicly stating the causes which are so injurious to, and have and still do produce such a diminution of the best fish in the British Channel. The fisheries have been always considered as forming a most important branch of the commerce of Great Britain and Ireland, and contributing materially to our national strength, by becoming permanent nurseries for seamen. Of the general fisheries I shall say nothing, but entirely confine my remarks to the Channel fisheries.

The fish most esteemed for the table taken with the trawl-net (for of those caught with the hook and line, and pilchards, herring and mackerel taken with the seine, we have nothing to say) are the turbot, the brill, kite, or hollybut, the sole, plaice, dorey, and a great variety of other fish less esteemed in quality, but equally valuable and useful to the middling and lower orders of society.

There are a great many of the fish abovementioned which certainly breed upon our coasts, as they are with us the whole year, and we see the young, even when they are not larger than a sixpence; there are others which only visit our shores and seas at particular seasons, such as the mackerel, the herring, the pilchard and the red mullet; they come and retire, and, except the mackerel, are all taken in a net or seine; and the greatest quantity of mackerel are thus taken, but many are caught with the hook. The red mullet are caught in the line late in the evening or early in the morning, I suppose on account of the disposition that all mullets have to leap over the net when they find themselves encircled by it; they do not sink to the bottom when surrounded by the net, like most other fish, but they rise to the surface and leap over the net; and when one makes a bound all the rest follow, like sheep; it is therefore necessary that they should not see the snare prepared for their destruction, which is the reason of their being taken in the dark.

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Extract Treatise on Zoology, by J. Cornish, Esq.

But the principal objects to which we wish to draw the attention of the public, and if possible the Legislature, are the fish taken in the trawl-nets, which are by far the most valuable sea fish.

We will hereafter inquire into the causes of their diminished numbers, and the injury which the public sustain thereby; and after making a few preliminary observations, proceed at once to state what has given rise to so general and well-grounded a complaint, *i.e.* the scarcity of sea fish.

These are twofold: First, from the fishing too near the coast; and, second, from the use of improper nets of too small mesh or moke; and both of which the present laws are not sufficiently effective, or at all calculated to prevent.

It is generally supposed that all sea fish (the cetaceous and cartilaginous excepted), that is, those of the spinous, testaceous, crustaceous, and mucilaginous kinds, deposit their ova in sand banks, in creeks, bays and shallow waters near the shores, because it is imagined that a certain, though a small degree of the sun's action on the water and atmosphere is necessary to bring such ova to maturity. This we know to be the case with the salmon species, which always ascend to the shallow parts of rivers for that purpose, and never lay their eggs in deep water, and therefore we infer that the same influence prevails over the sea fish: this cannot, however, be proved, and rests only upon opinion and probable conjecture, founded on such facts as we are acquainted with. They may shed their ova in the water instead of the sand or among the rocks, or under the weeds on the coast, where it is very abundant, where great numbers of fish certainly secrete themselves; and as soon as the young are excluded they may spread themselves all over the Channel, exactly like certain other animals, which, as soon as they burst from the egg, branch off on all directions, though no bigger than a pin's head, and shift for themselves.

Whatever the fact may be in this respect, it is worthy of attention to see what the preamble of the statute of the 3 James 1, c. 12, intituled, "An Act for the better preservation of Sea Fish," says upon the subject, being in these words: "Forasmuch as it is certainly known by daily experience that the brood of sea fish is spawned, and lieth in still waters, where it may have to receive nourishment and grow to perfection, and that it is there destroyed by weirs, draw-nets, and nets with canvas, or like engines, in the middle or bosom of them, in harbours, rivers and creeks within this realm, to the great damage and hurt of fishermen, and hindrance of the commonwealth, for that every weir near the main sea taketh in 12 hours sometimes the quantity of five bushels, sometimes 10, sometimes 20 or 30 bushels of the brood of sea fish; and also those which use draw-nets, and nets with canvas, or engines in the midst of them, do every day they fish destroy the brood of all the sorts of fish aforesaid in great multitudes, &c. &c." Then follow the enactments of the statute, but which do not apply to the present purpose.

I only mean to infer from the preamble to the above Act, which we cannot suppose to be destitute of all grounds on which it was passed, that the Legislature considered the roe to be deposited in shallow waters near the coast. The Act does not mention or regulate the size of the mesh of the net, but that circumstance we shall come to by-and-by, and have to observe upon more at large.

Then it is obvious, that if the sea fish shed their ova near the coast, and such ova and the young fish produced therefrom are destroyed in the way specified in the recited Act, that two remedies are necessary to prevent this great national evil. The first is, that fishing vessels should not use those nets so near the shore as to produce the mischief complained of; and the next is, that the meshes of all nets, no matter of what character or quality, should be of a sufficient size to enable the young and unsizeable fish to escape; and that the ova should not be disturbed by trawl-nets in the places on the coast where such ova are deposited.

This Act of James the First was followed up by the 13 & 14 Car. 2, c. 28, which, after setting forth the importance of the fisheries, as far as concerns the wealth and safety of the realm, and the divers pernicious disorders and abuses, by the licentiousness of the times, which have crept in, and yet continue evidently destructive of that trade, it was enacted that, after a time therein mentioned, "no person should from the 1st of June to the last of November presume to take fish in the high sea, or in any bay, pool, creek or coast of or belonging to Cornwall or Devon, with any drill-net, trammel or stream-net or nets, or any other nets of that sort or kind, unless it were at the distance of one league and half at least from the shore, upon the penalty of forfeiture of the said nets so employed, or the full value thereof, and one month's imprisonment, without bail or mainprize."

I think there can be little doubt but that among the "divers pernicious disorders and abuses crept in by the licentiousness of the times," in contemplation of the Legislature on the passing of this Act, was the destruction of the young fry and brood of fish in the shallows, which rendered it necessary that these fishing smacks or trawl-boats, using the trammel or trawl-nets should keep off a league and half, that is, four miles and half, from the shore; but these Acts are totally disregarded by the fishing smacks; they fish just where they please, sweeping the bays, shores and creeks with their trawls, destroying, by means of their small and illegal mesh-nets, everything which they can scrape up from the bottom, great and small, old and young, seasonable and unseasonable, and in number beyond the powers of the human mind, or the nature or accuracy it requires to calculate.

This is a very great and serious evil, productive of the most disastrous consequences, and is one great cause of the scarcity of the best sorts of Channel fish, millions of millions of which are thus destroyed when they are good for nothing; for only the small and young fish lie in the shallow waters, the large and full-grown fish are only to be met with in the deep waters.

Notwithstanding

Notwithstanding this evil, though prohibited by law, it is persisted in and daily practised; and as such law now stands, it cannot be well prevented, inasmuch as no prosecution can be entered under it but by an information at the suit of the King's Attorney-general, where the expenses and difficulties are so great that no man will interfere. No power of conviction is given to the sessions or the magistrate. The Act is also defective in a great many other respects, as well as its operation being confined to Devon and Cornwall, when it should be extended to the whole Channel; for the trawl-net, which was formerly only used in Devon and Cornwall, is now used throughout the whole coast.

But great as this evil is, a much greater one remains to be stated, for the 1 Geo. 1, c. 18, intituled, " An Act" (among other things) " for the preservation of the Fry of Fish," after reciting, by the fourth section, " that whereas of late years the brood and fry of sea fish has been greatly prejudiced by the using of nets of too small mesh, and by other illegal and unwarrantable practices, it is enacted, that after 1716, if any person or persons shall use at sea upon the coast of England, any trawl-net, drag-net, or any net whatsoever, for the catching of any kind of fish (except herrings, sprats, or lavidaian), which hath any mesh or moke of less than three inches and half at least from knot to knot, or which hath any false or double bottom, end or pouch, or shall put any net or nets, though of legal size or mesh, upon or behind the others, in order to catch the small fish, which would have passed through any single net of three inches and a half, all and every such person and persons so offending shall forfeit all and singular such net and nets so used contrary to the true intent and meaning thereof, and also 20*l.*, to be recovered by distress, and in default of payment to be committed to the county jail for a year; the penalty to be divided between the informer and the poor, and the nets to be burnt."

And by the seventh section of the said Act " for the further preservation of the Fry of Fish," it was enacted, " that if any person bring to shore in England, sell, offer, or expose to sale, or exchange for goods, any unsizeable fish; viz. bret, turbot, brill, pearl or codling, whiting, mullet, bass, plaice, soles or flounders, which shall not be of the several lengths or sizes following from the eyes to the utmost extent of the tail; viz. every bret or turbot 16 inches; every brill or pearl 14 inches; every codling 12 inches; every whiting six inches; every bass and mullet 12 inches; every sole eight inches; every plaice or dab eight inches, and every flounder seven inches; every person so offending shall forfeit such unsizeable fish so brought on shore, offered or exposed to sale, or exchanged as aforesaid, as in the said Act last mentioned, together with the sum of 20*s.*, to be levied as therein mentioned; and in default of payment, to be sent to the common jail of the county, there to be severely whipped and kept to hard labour for six days, and not longer than 14 days."

Then we see that there are three Acts to correct three evils; the first is the destruction of the fry of fish; the second is fishing too near the shore; and the third is the use of improper nets, which take the undersize and young fish.

Now we will examine each of these Acts, and see how well they are calculated to produce the end for which they were designed.

First, as to the statute of James the First; this, though a law, is a mere dead letter, because it cannot be enforced but through the Attorney-general; *ergo*, it cannot be enforced at all, consequently good for nothing. I only notice the Act to show by the preamble that the Legislature considered that sea fish spawned near the shore.

Second, the statute of Charles the Second is little better than that of James, and for the same reason, namely, that great injury if not ruin will attend any person who attempts to put it in force. Instead of an appeal to the sessions there must be a prosecution by the Attorney-general: the Act also is of local jurisdiction. If the difficulties of proof could be surmounted, which is no easy matter, and these Acts could be put in force, they never are; therefore, whatever they may be in point of law, yet in point of fact they must be considered as totally useless.

And third, the statute of Geo. 1, which though a little more particular, and good as far as it goes, yet is so extremely defective as to be of little use, and good for nothing; it is so far from being efficacious, presents so many imperfections and holes to creep out at, that in no one instance is it paid any regard to. The fishermen hold it in complete derision, and defy every attempt to get it enforced. This may seem an extraordinary assertion, but it is perfectly true. A learned judge, who once resided in the parish of Brixham, and who possessed as much legal knowledge and natural acumen as any man, made repeated efforts to enforce this Act, but they were all unavailable; others have since done the same, and to as little purpose; and really, when we consider the way in which this Act is worded, and how inapplicable it is to the nature of the subject, their defeat is not to be wondered at.

Then we may truly say, that though there are three Acts of Parliament, yet there is no law; for if there were 10,000 Acts, and they could not be put in force, there might as well be none.

Instead of the fishing smacks using nets of three inches and half mesh or moke, such mesh is so small as to take up a pea. I do not mean to say that the mesh is as small as a pea, but it is so small that when choked with weed, sand, &c. &c. nothing will pass through the bag of the net but water.

Though it is more to the injury of the fishermen themselves to use these small meshes than to any one else, yet they will do it in spite of everything that can be urged against it; there is no convincing them of the folly of ripping open the belly of the goose; the thing is beyond their comprehension; they say " all good fish that come to hook," and they cannot carry their views beyond this doctrine. There are also sundry difficulties in the way of enforcing this Act, which a new Act suited to the nature of the case might obviate, and it would be a very easy matter to put a stop to the use of nets which destroy so many

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millions of millions of the young of the best fish of all sizes: we shall touch upon the enormous evil of the present practice by and by much more particularly.

Then with regard to the mesh of the net, this Act is totally disregarded by the fishermen; it is loosely worded, and by no means calculated to further the objects for which it was passed; therefore another Act is absolutely necessary to meet the nature of the case, if it is ever intended that we shall have good fish cheap and plentiful. The fishermen just use what nets they please, and fish where they please, as if no law existed; and bid defiance to Acts of Parliament, magistrates, judges, attorney-generals and every one else.

Then we have just seen the words of the 7th section of the Act, which is avowed to be for the further preservation of the fry of fish, in which it was enacted, that if any person should bring to shore, sell, offer or expose to sale or exchange for goods, any of the unsizeable fish before mentioned, he should forfeit such fish so brought on shore, and the penalty of 20 *s.*

Then the legal offence is "bringing to shore and offering to sale," which offence they never commit; not the taking and destroying of fish, this is no offence; and this they do all day long, and are not punishable for it, though it is the offence intended. The avowed object of the Act is "the further preservation of the fry of fish;" one would then naturally imagine that the Act should contain some intrinsic appropriate words to give it operation, and to prevent the taking, killing, destroying or in anywise injuring the undersize fish, which the Act was passed to protect; but not one word to this effect. What, then, is not excepted is granted: they have a right to take, kill, injure and destroy all fish, young and old, because they are not prohibited from doing it, though the Act intended they should do neither; and therefore they actually do, in their unlawful small mesh nets, take, kill, injure and destroy millions of millions of young and unsizeable fish, and their so doing is no legal offence. Is not this wonderful! What have they then not a right to do? Why, they have no right "to bring to shore, sell, offer to sale or exchange" such unsizeable fish; to do either would be an offence against the Act, that they well know, and therefore they do neither. Instead, then, of bringing to shore what they have destroyed by wholesale, they select such ones as are unfit for the market, keeping some for their own private use, which they call tea-fish, and all the remaining mass of diminutive fish and ova are first destroyed and then thrown back into the sea, as food for birds and fish. What the ova consists of no one can tell; but the small fish are turbot, brill, soles and doreys, from the size of a pin's head to sixpence, and so upwards. Although these men can be under no control, and may do what mischief they like, they are restricted from doing what they never do or have any occasion to do, but are allowed to do that which they ought not and are constantly doing. Can any thing be so monstrously absurd?

Thus these trawl nets disturb the fry of fish, which the Act was passed to preserve, and yet the fishermen commit no offence against the statute, except using the small mesh net, in which they cannot well be detected by the present law, or if they can, they never are.

Surely these anomalies, contradictions, absurdities, and mischievous consequences should, by a fresh enactment, be inquired into and prevented; that is, there should be effectual means taken to keep the fishing-smacks at a proper distance from the coast, and to prevent the use of the small mesh net, and then the young and unsizeable fish could not be taken or destroyed.

I will now endeavour to point out, as well as I can, the mischief which is done to the Channel fisheries, not merely on the coast of Devon and Cornwall, but in every part of the Channel where those trawl-boats or smacks fish.

Most folks know the nature of the drag net, or trawl, or trammel; but as many may not, I will describe it as accurately as I can. It is so called from its trailing along on the bottom, dragged by a vessel under sail; the vessels, commonly called smacks, are of different sizes, from 20 to 60 and 70 tons; and according to their dimensions and power of sailing, so is the trawl-pole (on which the net is extended) and net in proportion.

It is, then, a net of a triangular form, fastened to a pole from 20 to 30 feet long, each end being supported by an iron foot about 12 or 14 inches high, to keep up the pole from the ground; then the upper part of the net is fastened to this pole, and the lower part trails on the ground, with a mouth, if I may use the expression, 30 feet wide and a foot high. This net is so contrived, that, like the lion's den, whatever once enters never comes out again; it gets back into the bag or further end of the net, and thus every animal soon becomes lifeless; a fish as large as a pea cannot escape.

Now the bag of this trawl, instead of having a mesh three inches and a half wide, is so small, that when choaked with sand and weed, no fish, however small, can pass through. When drawn up, it is full of ova of all descriptions of fish, to a size scarcely discernible by the naked eye, and so on progressively increasing. Such fish as are marketable are put aside for that purpose; such as are eatable, but not marketable, they use themselves, or dress and eat them instantly almost alive; such as are too small to be either marketable or eatable are returned to the sea in number surpassing all calculation.

Now I have been informed that nearly 150 of these fishing smacks, or thereabouts, of various sizes, fishing in different parts of the Channel, belong to the port of Brixham alone. The net is down generally about half an hour, and when the weather is favourable is at work both by night and day; then it is drawn 48 times in 24 hours, but perhaps not at all times so often; we will therefore only estimate the taking up the net 24 times a day, which, from the Brixham boats alone, amount to 3,600 hauls in one day, and every time it is drawn it is loaded with all descriptions of young turbot, brill, sole, flounder, and every kind

kind of fish which lies at the bottom, in number and size incalculable; all of which, after the selection before mentioned, is returned from whence it came, only dead instead of alive. Appendix, No. 6. Extract Treatise on Zoology, by J. Cornish, Esq.

Then these 3,600 hauls are confined to the vessels of one port. It baffles all the powers of calculation to form anything like a correct judgment or estimate of the general destruction or injury which is committed on the Channel fisheries by the use of these small mesh nets by all the fishing smacks belonging to all the other ports of the kingdom; when, if the mesh was regulated according to the letter of the Act of Parliament, every small and young fish would pass through and escape, and consequently attain a fair size: thus an improved fishery would not only find employment for all, but would be a nursery for seamen, and furnish abundance of rich food for many of those who do not now know the taste of a good bit of fish.

I know what I say to be true, because my own eyes have witnessed it. A respectable gentleman of Brixham once told me that he had seen a whole boat-load of these young useless fish and fry collected from the trawlers and thrown into the water.

It must be obvious to every thinking person that these practices are not only contrary to sound policy, but against the express letter and spirit of an Act of Parliament, and are the great cause of the scarcity and dearness of the best sort of fish, which will never again be plenty and cheap until an effectual law is enacted to keep the trawl-boats out of the bays and creeks where the fish spawn, and at a proper distance from the shore, and until the use of the legal mesh is enforced by a law properly worded and calculated for that purpose: it will then not be in the power of the fishermen to destroy the young fry, however careless and inconsiderate they may be, and regardless of the consequences of using their present nets: nothing will prevent their doing mischief but rendering it impossible: most of them acknowledge that it is wrong, and even against their own interest, but they say, whilst one does it another will. Nothing but an Act will settle this question.

One of the reasons which they assign for using the present nets is, that a larger mesh would enable certain fish of a long form or growth, such as whiting, hake and others, to pass through: this may be true, and yet it amounts to nothing; for the trawl was intended to catch the ground or flat fish, many of which do not take the hook, and not those which do; and the trawl injures those fish so much that hook-whiting are always much more esteemed than trawl-whiting. The injury, then, to the breed of flat fish by small mesh nets ten times overbalances the advantage of taking other fish.

Whether, from what has been observed, this subject is of sufficient importance to require legislative interference, I must leave others to determine; but this I will venture to assert, without the fear of contradiction, that unless something is done the best fish will never more be plenty or cheap.

In the bays and harbours on the coast of Lapland, round the North Cape, I have read that they have that noble fish the voite or brill of 200 lbs. weight; but here the fish is not often taken; indeed, it may be considered a rare fish altogether, and when taken is seldom larger than a moderately-sized plaice or flounder. As to turbot, we seldom see such a thing in our market, and it would be wonderful if we did, when so many millions of both sorts are destroyed in the manner before mentioned, entirely from the use of those small mesh nets, and fishing so near the shore, and in bays and creeks upon the coasts.

Thus we see that where so great a proportion of the labouring people are idle for want of employment, and vicious because they are idle, for an "idle head is the devil's workshop," the fisheries are totally neglected, which would be a nursery for seamen, and a resource for the supply of our fleets; 100 men would then be employed where one is now. We see that by the violation of every principle of common sense, common honesty and sound policy, as well as the abuse of an absolute law, that the inexhaustible treasures of the ocean are wilfully wasted, when they would provide abundance of good food for a starving population, thousands of whom are perishing for want of meat to eat, naked for want of raiment, and vicious for want of honest employment.

The duty on salt is taken off, and the superfluity of fresh fish might be laid up in store as winter food; but can these things be, with such a frightful statement of facts as has just been made, when so many millions of millions of the best fish are so wantonly destroyed, and what are not destroyed are consequently so dear as to be out of the reach of the poor, and expensive to the rich.

Perhaps most folks would be inclined to think that an attention to the improvement of our Channel fisheries would not be unworthy the consideration of Government; but this improvement can never be effected unless the present laws are repealed and others enacted in lieu of them, more congenial to the nature of the subject; for it must be obvious to every one who will attend to the facts before stated, that the present laws are extremely inadequate to the purposes required of them.

Appendix, No. 7.

Extract from a LETTER of the Honourable *George Vernon* to *James Cornish*, Esq., referred to in Mr. *Cornish*'s Evidence. Appendix, No. 7. The Hon. G. Vernon to J. Cornish, Esq.

Sir, Sudbury-hall, near Uttoxeter, 30 Dec. 1824.

I HAVE been reading your work upon the Fisheries with much satisfaction and instruction, and I beg to congratulate you as having been the first person to lay open and investigate the manifold abuses which exist, and to propose an effectual method for remedying the evil.

Appendix, No. 7.

The Hon. G. Vernon to J. Cornish, Esq.

With respect to the Channel fisheries, during the time I lived at Churston-court, Torbay, from 1812 to 1820, I took a great deal of pains to investigate and ascertain the causes of the decay of the sea fishery. It appeared evident from the information of all the most intelligent fishermen, that the summer and autumn fishing in the bays, especially Startbay, Torbay and Balicombe-bay, was the main cause of the mischief. I persuaded the fishermen in the years 1816 and 1817 to let the bays remain undisturbed from July to October, the only power upon which I had to act being the general illegality of the meshes of all and every net belonging to them. I witnessed the commencement of fishing 1st October 1816, and anything like the destruction of small flat fish in Torbay was never heard of before; the eyes of the fishermen were opened, and they petitioned for legislative interference. Expense and difficulties stood in the way of a private Bill, and which (had it been practicable) would not have applied to the kingdom at large; a public Bill was therefore determined upon, prepared by me upon the information I had in the course of many years acquaintance with that part of the coast obtained, and aided by the advice of an experienced legal friend. This Bill went through the Commons without opposition, and through two readings in the Lords, but was thrown out on the third reading, on the plea of its being too late in the session for the subject to have that consideration it required; since that time I have given myself no further trouble. If you have any wish to see the Bill, I will send it you post-free.

I am, &c.

George Vernon.

Appendix, No. 8.

Appendix, No. 8.

Mr. G. Brooking to Lieut.-col. Seale, M. P.

LETTER from Mr. *G. Brooking* to Lieut.-colonel *Seale*, M.P.

My dear Sir, Custom-house, Dartmouth, 20th June 1833.

I HAVE received your letter of the ' instant, and having been absent from home until late last evening have been prevented from answering it until now. Respecting the Fishing Bill about to be taken before Parliament, I beg to draw your attention thereon to the oyster dredgers from Portsmouth and Chichester, which have frequented our harbour for the last three or four years to dredge for oysters, simply for spawn for other rivers, coming here at the breeding season, thereby destroying the beds of oysters in this river as well as the mussel-bed, to the very great injury of the poor fishermen here. As a proof of the injury, mussels, for which the Dart was so famed, are now so scarce, that instead of supplying the fishermen of the neighbourhood, we are obliged to send to Exmouth and Teignmouth for them, and instead of buying at 4 *d.* or 5 *d.* per basket, or picking them up a boat's load in a tide for nothing, on the banks or shoals in the river, now pay 9 *d.* or 1 *s.* per basket.

Complaint was some time since laid before the magistrates of the borough, whom I considered were the conservators of the river, who were pleased to declare that they did not consider they were authorized to interfere, but acknowledged the evil. Mr. Studdy, at Watton, prevented them from dredging on his part of the river solely from the injury which they occasioned by disturbing the beds at unseasonable periods. I am aware that I address one fully acquainted with the nature of the evil of having four or five boats daily, with each six dredges, scouring over an oyster-bed in the breeding season, therefore submit it to you whether restriction is not required for their fishing in proper season. Respecting the trawlers fishing so close to the shore, I must confine myself to the mere observance that it would be desirable to have fixed fines to keep them to fish at a proper distance from the shore; the proper distance I would submit to abler persons than myself to determine.

I am, &c.

G. Brooking.

Appendix, No. 9.

Appendix, No. 9.

Mr. R. Turner to Lieut.-col. Seale, M. P.

LETTER from Mr. *Richard Turner*, Secretary to the Brixham Fishing Society, to Lieut.-colonel *Seale*, M.P.

Honourable Sir, Brixham, 22 June 1833.

IN consequence of the receipt of your two letters, addressed to Mr. Lakeman and Mr. Moses Tyrer, a meeting of the most respectable fishermen of this town took place on Thursday the 20th instant, at the Victory Inn, and again by adjournment on Saturday, this day; Mr. Moses Tyrer in the chair. It was resolved that every information should be given in respect of the grievances the fishing trade labours under at this time. In compliance with the above resolution, I beg humbly to inform you that at a public meeting of the fishermen of Brixham, on the 10th day of June inst., a petition was adopted and forwarded to Lord John Russell for presentation, with a request that his Lordship would support the prayer thereof. It appears, Honourable Sir, that from the great quantities of fish imported from Holland and other places by foreign fishing b[illegible] and more particularly by steamers, that London

London and other markets in this kingdom have been glutted, and the consequences are that many fishermen are thrown out of employ, and they with their families are now become paupers on the parish.

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Mr. R. Turner to Lieut.-col. Seale, M. P.

I am also requested to inform you that the money arising from the sale of the fish so imported is not expended in the manufactures of this kingdom, but is invariably transmitted to Holland. Had the trade been reciprocal, a fair opportunity would have offered for the welfare of the British fishery; but it is well known that the sale of fish by British fishermen in any foreign port is prohibited, even if driven there by stress of weather.

The meeting considers that no public enactment whatever would increase the breed, as at this time the bays of this kingdom abound with fish, and that the sole distress appears to arise from the immense importation from Holland and other places.

The meeting, Honourable Sir, would also impress on your mind, that in consequence of such importation of foreign fish, a great number of persons are prevented from embarking their capital in the fishery trade; consequently preventing or in some measure destroying that great nursery for seamen, namely, the British Channel fishery. I am further requested to say that the meeting have no one in London to recommend as a fit person to be examined by the Committee as to the facts above stated; but should it be deemed necessary, the Fishing Society of this port will depute a person of Brixham for that purpose.

The meeting further considers that the Act now passing through the House of Commons, in respect of seamen's apprentices, will be highly beneficial to this place, as well as all other sea-ports; and will, Honourable Sir, feel grateful by your supporting the passage of the Bill through the House.

The Fishing Society of this place beg to present their grateful acknowledgments for your kind exertions in their behalf, and humbly pray that you will further support their application. With due respect,

I am, &c.

Richard Turner,

Secretary to the Fishing Society.

Appendix, No. 10.

STATEMENT of PILCHARDS Shipped in 1832; referred to in the Evidence of *Alfred Fox*, Esq.

Appendix, No. 10.

Pilchards shipped in 1832.

FIRST CATCH—(August).

DESTINATIONS.	VESSELS' NAMES.	Number of Hhds.		QUALITY.	WHEN SAILED.
Leghorn	Catharine	500		seine	Loaded Oct. 3, detained till 13.
	March	574		ditto	Oct. 4, put back, and sailed again 13.
	Agneneria	600		ditto	Oct 23.
	Maria	361		ditto	— 27.
	Sarah	555		ditto	Nov. 7.
	Liverpool Packet	650		ditto	— 14.
	Rosewall	596		ditto	Dec. 4.
			3,836		
Genoa	Heligan	450		seine	Oct. 1, put back, and sailed again 13.
	Levant Packet	500		ditto	Loaded Oct. 6, detained till 13.
	Venus	600		ditto	Oct. 25.
	Jane	284		ditto	— 30.
	Hiram	600		ditto	— 31.
	Roselle	682		ditto	Nov. 23.
			3,116		
Malta	Solace	237		small seine	Nov. 9.
			237		
Ancona	Haidee	489		drift	Sept. 18.
	Union	700		mostly drift	Oct. 3.
	Bramley	700		⅔ the seine	— 18.
	Earl Grey	600		seine	— 21.
	Shepherdess	650		ditto	— 25.
	Comet	650		ditto	Nov. 2.
	Sir D. Ogilby	672		mostly drift	— 7.
	Paul Pry	617		seine	— 21.
			5,078		
Trieste	Sir B. Wrey	435		seine	Nov. 17.
	Camilla	550		ditto	Dec. 4.
			985		

Appendix, No. 10.

Pilchards shipped in 1832.

DESTINATIONS.	VESSELS' NAMES.	Number of Hhds.		QUALITY.	WHEN SAILED.
Naples	Amity	427		seine, and partly small	Oct. 1, put back, and sailed again 13.
	George Canning	254		seine	— 6, ditto - - ditto - 14.
	Packet	700		ditto	— 25.
	Mary	389		ditto	— 26.
	Charles	535		ditto	— 26.
	Magnet Packet	435		ditto	— 27.
	Ann Williams	320		ditto	
	Palmer	700		ditto	Nov. 8.
	John Daniell	600		ditto	— 9.
	Naples Packet	870		ditto	Dec. 4.
	Commerce	442		ditto	— 4.
	Rapid	590		ditto	
	James & Edward	220		mixed	
			6,482		
Venice	Lavinia	582		drift, and partly old	Sept. 19.
	Post Boy	575		seine and drift	Oct. 13.
	Favorite	650		seine	— 18.
	New Manley	600		ditto	— 25.
	Adelaide	517		ditto	— 27.
	Elizabeth	600		ditto	
	Nymph	662		ditto	
			4,186		
Leghorn and Naples.	Freedom	544	544	mostly small	Oct. 4.
	TOTAL		24,464	Hhds.	

SECOND CATCH—(6th December).

Naples	Racer	600		seine	Jan. 23.
	Henrietta	450		ditto	— 25.
	Albion	549		ditto	— 26.
	Red Rover	550		ditto	— 30.
	Corsair	600		ditto	Jan. 30, put back damaged, and sailed again 9th March.
	Louisa Maria	700		ditto	Feb. 9.
	Solace	337		ditto	— 22.
	Flora	760		ditto	— 22.
			4,546		
Venice	Antelope	450		ditto	Mar. 17.
	Eliza and Nancy	490		ditto	— 16.
	Venus	470		ditto	— 10.
	Eliza Scott	600		ditto	
			2,010		
Civita Vecchia	Selina	510		ditto	Feb. 22.
			510		
		7,066			
			7,066		

First Catch - - 24,464 Hhds., at 38 *s.* average.
Second ditto - - 7,066 — at 25 *s.* ditto.

Total. 31,530 Hhds.

Cornwall.—Falmouth, Penzance, St. Ives, Fowey, custom-houses at which pilchards are shipped; some few are shipped at Padstow and Looe, on the Cornish coast; and some at Plymouth, in Devon, but very rarely.

Appendix, No. 11.

Appendix, No. 11.

Fish caught on the Coast of Cornwall.

LIST of FISH caught on the Coast of *Cornwall.*

ALFRED FOX begs to transmit to Sir Charles Lemon a list of most of the fish caught on the coast of Cornwall, which he understood would be acceptable to the Committee on the British Channel Fisheries:

Falmouth, 27th 6 mo. 1833.

Cod	Conger	Grey mullet
Pollock	Ling	Sir mullet
Braim	Hake	Bass
Chad	Tub	Dogfish

Pilchard	Gurnet	Thornback
Herring	Piper	Ray
Whiting	Sturgeon	Cuddle
Haddock	Salmon	Bibs
Soles	Salmon peal	Gerrick
Lantern soles	Rath	Cuckow
Merry soles	Turbot	Stone bass
Silver heads	Holibut	Skipjack
Lemon soles	Smelts	Shark
John Dorey	Mackerel	Mana
Plaice	Pilchard scads	Porpoise
Dabs	Mackerel scads	Sea toad
Flounders	Sprats	Spurdogs.

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Fish caught on the Coast of Cornwall.

And some varieties of several of these kinds of fish; besides crabs, lobsters, shrimps, prawns, oysters, scollops, mussel, crayfish, and other sorts of shell-fish.

Appendix, No. 12.

LETTER from *Alfred Fox*, to Sir *Charles Lemon*, Bart., M. P.

Appendix, No. 12.

Alfred Fox, to Sir C. Lemon, Bart. M. P.

Esteemed Friend, Falmouth, 27th 6 mo. 1833.

A MEETING of several gentlemen of Falmouth and St. Mawes concerned in the pilchard fishery, was held at this place on the 24th instant, to consider whether it would be expedient to submit any and what observations to the Committee on the British Channel Fisheries. We feel much pleased that such an inquiry has been instituted by the House of Commons, and I am requested to wait on thee with the following remarks, for the information of the Committee.

We consider it a very important object to obtain a reduction (the total repeal being scarcely to be hoped for) of the heavy duty payable on pilchards at Naples; viz. of 5.46 per hhd., which at 40 *d.* per ducat, equals 18 *s.* 2 *d.* per hhd. This duty on our exports of pilchards to Naples last season amounted to about 10,000 *l.*

The benefit to be derived from any reduction would probably be divided between the Neapolitan consumer and the Cornish fishermen; and we should also acquire the additional advantage of an increased demand.

The Board of Trade some years since expressed a desire to obtain some relaxation of this heavy tax on our fisheries, and last year our Government instructed Lord Ponsonby, as we have been informed, to make an application to the Government at Naples for relief, but that nobleman proceeded to Constantinople, and we are not aware that any positive progress has been made towards the early accomplishment of the object in view; though we have some reason to hope that the Neapolitan Government may yield to continued remonstrances on the subject. It may, perhaps, be necessary to make a concession of part of the duties on certain Neapolitan goods imported into this country, and especially on Gallipoli oil (which now pays a duty of 8 *l.* 8 *s.* per ton of 252 gallons), before the Government at Naples will accede to the wishes of the Cornish and Devon, Yarmouth and Poole fishermen, who contribute so largely to the revenues of that country by the duties on pilchards, herrings and cod-fish.

I am also instructed to state that tithes are claimed on pilchards caught and cured on certain parts of our coasts, and are felt to be very burdensome, whilst in some others of our fishing coves no such custom has been established, the claims being founded on custom, and not on any Act of Parliament.

The amounts of the tithes demanded in different fishing-coves, where they are payable, vary considerably; in proof of which I may observe, that at Mevagissey the fish curers pay annually 1 *l.* 13 *s.* 4 *d.* per seine, and one-twelfth of the men's one-fourth share of the fish caught, which has sometimes amounted to 20 *l.* and upwards for the tithes on each seine. At Guranhaven, distant two miles from Mevagissey, 1 *l.* per hhd. is paid by the men and owners; and at St. Mawes, 1 *l.* 1 *s.* 1 *d.* per seine, besides 7 *s.* 7 *d.* for every man employed on the seine who resides in the parish, which amounts to about 7 *l.* 10 *s.* per seine, whether fish be caught or not.

In some places in Cornwall the poor men, who gain their livelihood almost entirely by hook-fishing, are obliged to pay tithes on their boats.

The loss of the bounty of 8 *s.* 6 *d.* per hhd. on pilchards exported is severely felt, and has greatly diminished the number of men and the quantity of craft employed in the fishery; but we conclude that it would be vain to hope for a renewal of this powerful stimulus to an extension of the fishery. We take the freedom to invite the obliging attention of the Committee to a Bill prepared by Lord Vernon, and passed through the House of Commons in 1817, but rejected by the House of Lords, which had for its object to regulate the fisheries on the coast of Devon. The subjoined clauses in the said Bill appear to embrace provisions which would very advantageously supply deficiencies in the existing law; namely:

Clause No. 3—prohibits the use of certain nets and the destruction of the fry of fish.
9—relates to cutting, &c. the hawsers, &c. of fishing-boats.
10—relates to stealing lobsters, &c. out of catching pots, &c.
11—relates to wilful damage done to fishing-boats, nets, &c.
12—enables owners of boats, &c. to recover from their servants the amount of damage caused by the negligence of such servants.

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I shall be much obliged by thy taking the trouble to send me a copy of the evidence given before the Committee, when printed, and a copy of the Bill that may be prepared in consequence.

I remain, &c.

Alfred Fox.

Appendix, No. 13.

Appendix, No. 13.

LETTER from Mr. *John Pearce*, jun. to Sir *Charles Lemon*, Bart., M. P.

Mr. J. Pearce, jun. to Sir C. Lemon, Bart. M. P.

Sir, Upper Thames-street, 20th June 1833.

YOU were so kind as to say that you would be ready to receive and attend to any information I might be able to send you on the subject of our pilchard fishery. I have in consequence communicated with my friends at Mevagissey, and, as wished by them, I now beg leave to hand you the enclosed. I have been led into greater length than I had intended, and shall need your kind excuse for so great an intrusion on your valuable time.

I would only beg leave here to add, that all I have stated is founded on actual experience, and that I pledge myself to the correctness of all the facts set forth. This is our great grievance.

But in the event of any legislative enactments for the regulation of the Channel fisheries generally (and that a measure of the kind is much needed there can be no doubt of), the proprietors of the "Seine Fishery" would be very desirous that the rules and regulations for the prosecution of their fishing should be legalized by Act of Parliament: at present, with the exception of an Act limited to St. Ive's Bay, there is no law for the regulation of the seine fishery. Perhaps it would be difficult to define in an Act of Parliament the varied stipulations applicable to different stations; but would it not be possible to legalize such rules and regulations as might be agreed on (in a way to be defined by the Act) by the different principal places, on their being properly enrolled at quarter sessions?

In respect of the trawl fishing, and drag-seine fishing, I never had, and never shall have, but one opinion, that they are ruinous in their tendencies, and call for much severe regulation, if any remnant of the breed of fish is yet to be preserved.

If it would be your pleasure to see me, I shall be most happy to wait on you, either at your residence or the House of Commons, on any day and hour you may appoint. And again soliciting your excuse for the great liberty I have taken,

I am, &c.

Jno. Pearce, jun.

Appendix, No. 14.

Appendix, No. 14.

STATEMENT of the Nature and Importance of the PILCHARD SEINE FISHERY, and of the great Injury caused to it by the operation of the Drift Nets, applicable chiefly to the Line of Coast from *Plymouth* to *Falmouth*.

The Pilchard Seine Fishery.

THE pilchard fishery is generally understood to mean the pilchard seine fishery; but pilchards are also taken by the means of drift nets. The quantity of pilchards taken by the seines has in some years exceeded 50,000 hhds. exported, and of late has averaged about 25,000 hhds. yearly. In years of the greatest success the quantity taken by the drift nets has scarcely exceeded 3,000 hhds., and those limited to the Mount's Bay and St. Ives.

A single seine has been known to take at one time so much as 1,800 hhds.

The seine is a large net of about 200 fathoms long by about 14 fathoms deep, having leads at the bottom to keep it on the ground, and corks at the top sufficient to float it, so that the operations of the seines are necessarily limited to such a distance from the shore as gives a depth of water of 12 or 14 fathoms. The drift nets are adapted for fishing in deeper water; and as their operations, when carried on near the shore, are calculated to disturb and turn aside the fish, and prevent their coming into shallow water, to the great injury of the seine fishery, the Act of 13 & 14 Cha. 2, s. 2, c. 20, 1662, limits their operations to four miles and a half distant from the nearest headlands.

The observations of fishermen lead to the belief that pilchards are in the Channel, and at no great distance from the extreme headlands of the Cornish coasts all the year round; that in the month of July they begin to get in season, and when the operations of the drift nets commence in deep water; that early in the month of August these fish, or rather certain portions of them (as when the excess of bees swarm) draw towards the necks of the several bays, and where they are often known to remain four, five or six weeks, occasionally (as certain states of the tides seem to suit their proceedings) drawing near to the shore, and when the seines are put in operation. These the fishermen call Bay fish, and the taking of them, the Bay seine fishery.

That, in addition to these Bay fish, a further considerable body, from which perhaps these have emanated, remain it is supposed in deep water, and which main body, joined perhaps by the accession of larger bodies coming from a greater distance, often towards the end of August to the middle or end of September, make a general strike along the whole coast, or, striking at one particular part, coast it along the whole line, or certain parts of it. This strike

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The Pilchard Seine Fishery.

strike of the main body is seldom known to occur more than once or twice in a season, and is generally considered as conclusive of the fishery.

Pilchards always travel in bodies composed of separate and distinct shoals, varying in extent from 2,000 hhds. to 10 hhds.; these shoals (not without some reason) are supposed to have leading fish to direct them; they have a most lively instinct of danger, and are liable to be diverted from the shore by the least interruption and noise.

The pilchard fishery (seine being always understood,) has, more particularly on the line of coast from Plymouth to Falmouth, been very unsuccessful for a period of 15 years, and is now, on this line of coast, reduced to a most depressed and suffering condition.

This want of success is no doubt partly attributable to the fish in some seasons not having drawn towards the shore, but in the opinion of all practical men employed in or on the fishery, is chiefly caused by the great increase in late years of drift nets, and by the drivers following the fish in as they draw near the shore, and thus constantly interrupting their progress, diverting and dispersing the shoals, and preventing them from coming into shallow water; indeed, to such an extent is their daring carried, that instead of keeping out to the distance of four miles and a half, as prescribed by the Act, they are often within a mile of the headlands, and indeed often in a line between the headlands, and so consequently on the necks of the bays.

It is to the Bay fishery that these lawless proceedings of the drift boats are so injurious and destructive. When the great main body of fish strike on the shore, they are not considered capable of doing much injury; in confirmation of this, what little success has attended the fishery from Plymouth to Falmouth of late years, has arisen from the strike of the main body, whilst the Bay fishery, which used to be the depending source, has been almost entirely unsuccessful. Now, when it is considered that the "strike" of the main body is uncertain, seldom occurring but once or twice, and when the weather is often such as to prevent their being taken, the necessity of some better protection than already exists to the Bay fishery, must be apparent.

In Carew's Survey of Cornwall, under the head of Fish, and speaking of the pilchard and the mode of taking them by seines and nets, he says, "The seiners complain with open mouths that those drovers work much prejudice to the commonwealth of fishermen, and reap thereby small gain to themselves; for, say they, the taking of some few breaketh and scattereth the whole shoals, and frayeth them from approaching the shore: neither are those thus taken merchantable, by reason of their bruising in the mesh." So that it must be seen that the view here taken of the great injury caused by the drift nets when transgressing the law, is no newfangled notion; for more pertinent words than these of Carew's description of this case could not well be found, and more particularly as to the comparative injury and benefit, since one seine will often take more fish at a time than all the drift boats from Plymouth to Falmouth during the whole season; and it is notorious that the pilchards taken in drift nets by strangulation are not nearly as good as when taken in seines. It is generally understood that the Act of Charles 2d for the regulation of drift nets, arose out of the disputes as noticed by Carew, and that it was a mutual arrangement between the conflicting interests: there is also no doubt but that the Act was effective at the time, and that it caused the revival and increase of the seine fishery. But in the present day the Act is become almost a dead letter, for there being no provision in it for summary jurisdiction, the magistrates require every case to be taken to the quarter sessions, the great expense attending which amounts almost to a prohibition. Some cases have been tried, and a verdict invariably obtained; but the expenses have been so great, that the seine proprietors, though they see that nothing but ruin to the seine fishery can follow, have reluctantly been obliged to give up prosecuting.

Mevagissey is the principal fishing station between Plymouth and Falmouth, and is more dependent on the Bay fish than almost any other place. It sent to sea in 1818 about 40 seines, but can now scarcely raise 21 effective, so that the falling off of this most important branch of trade is self-evident. Now these 21 seines, each seine or concern having three boats, keep afloat 16 men and 2 boys each, making a total of 336 men and 42 boys; no very unimportant consideration, certainly, as an induction or leading-string (if nothing more) to our mercantile and navy marine. The employment given on shore to men, women and children, by these 21 seines, may be said to comprize, directly and indirectly, nearly the whole population of the place, which is almost entirely dependent on the fishery. The original cost of each seine or concern is about 1,000 *l.* afloat, and the capital on shore in cellars, salt, &c. &c., cannot be reckoned at less than about 500 *l.* a seine, thus forming a total of outlay of about 32,500 *l.* It would be difficult to define a limit to the capabilities of these seines taking fish, and which is in fact only governed by the size of the shoals, since a shoal in a seine's draft was scarcely ever known so large as that a single seine would not enclose it. It may be safely stated, that under circumstances of good and general success, the 21 seines might land 10,000 hhds.; but under the lamentable circumstances attending the fishery at this place of late, the yearly produce, with only one exception, has scarcely exceeded 1,000 hhds., and in some years much less than this. Now the driving boats at Mevagissey and its immediate vicinity are, about 23, having two men, and in some instances two men and one boy in each boat; they gain little or no employment on shore save to themselves, their wives and children. The cost of a boat and nets may be from 50 *l.* to 100 *l.*, depending on the size, and their capabilities of taking fish are limited, and almost confined to the home market, as under the greatest success they seldom catch in sufficient quantities as to be enabled to cure any for exportation.

Such is the comparative importance of the seine and drift fishery at Mevagissey: the case generally is much the same on the whole line of coast from Plymouth to Falmouth, and

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The Pilchard Seine Fishery.

yet important as the seine fishery is shown to be, and comparatively insignificant as is the drift fishery, the important branch is fast sinking under the lawless proceedings of the drivers, and in the end must be its total ruin, unless it be protected by the Government or some more effective legislation.

It must be understood that the foregoing observations apply entirely and solely to the line of coast from Plymouth to Falmouth, it being on this line only that the bay fishery is much known; and a very casual observation of this line on the map will show the many deeply indented bays in which the fishing stations are formed; from the Land's End all up the north coast the fish strike in large bodies, and where the operations of the drivers are very harmless. In the Mount's Bay there are a considerable number of boats of large dimensions, as many as 100 or 150, which, fitted out principally for the mackerel and herring fisheries, are employed in the pilchard season to drive for pilchards; these, it is understood, generally drive far out at sea, and where their operations are harmless; but they are capable of inflicting the same injury as the others when they follow the fish in to the shore, and it is, I believe, generally considered that the seine fishery in the Mount's Bay has often suffered considerably by them; of course these boats, from their number and size, take in more considerable quantities than the drift boats east of the Lizard; but the comparison is much the same as the others, and the injury to one party great, whilst the benefit to the other is partial and trifling; in fact, I believe it may be stated, without fear of contradiction, that were it not that these boats' chief occupation is on the mackerel and herring fisheries, they could not exist merely as drift boats for pilchards. This remark also applies to the drift boats east of the Lizard, which have generally other employs at the other periods of the year, when they do not drive for pilchards; whilst the boats and seines employed on the seine fishery have no other means of employ, and can no otherwise be disposed of than to be cut up and sold piecemeal, when the proprietors are sick and tired of adventuring, as many have been within the last few years.

It is too much to expect any alteration of the existing law during the present session; but in the mean time, it is really incumbent on the Government to do something this season for the protection of so important and so suffering a branch of national industry, nursery and wealth as the seine fishery is shown to be. If they would but direct two well-appointed sailing-boats of large dimensions to keep on the line of coast, one from the Ram-head to the Gribbin, and the other from the Gribbin to a little south-west of the Dead-man; or if they would order the revenue cutters on these stations to see that the drift boats kept at proper distance, it would answer every purpose; and as the period would only be from the first of August to the middle of September, the expense or trouble would not be great.

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Appendix, No. 15.

LETTER from the Rev. *William Norris*, to *J. Halcomb*, Esq. M. P.

The Rev. W. Norris to J. Halcomb, Esq. M. P.

Sir, Warblington Rectory, Havant, July 2d 1833.

I MUST, as a stranger, apologize to you for thus addressing you (which I do in behalf of my parishioners, many of whom are fishermen) as Chairman of the Committee of the House of Commons now sitting on the British Channel Fisheries. I have been requested to represent to you, that Emsworth, in the parish of Warblington, is situated on a harbour connected with Chichester and Langstone harbours, and that it formerly abounded in fish of all kinds, but particularly in oysters; that many of these fish have for some years past been destroyed by persons coming in large vessels, and dredging for them at irregular seasons, and with nets so small that much of the spawn and young fry is taken, to the injury of the brood; that the law is so uncertain on the subject that it is difficult to convict even those who offend against it, in consequence, among other things, of a clause which permits small fish to be sold, provided no more than 6*d.* per lb. be demanded for the same, although below the legal size; that having obtained, through the influence of Mr. Bonham Carter, one of the members of the Committee, permission to have two persons from Emsworth examined as to the state of the Emsworth fishery, before the said Committee, we are desirous that the attention of the Committee be drawn especially to the necessity of appointing times for regulating the fishing seasons, and also for restraining persons from exposing to sale fish under a certain size; and that we beg to suggest, that in every harbour some person should be appointed whose official duty it should be to enforce such penalties as may be imposed on an infraction of the law. The persons who are deputed by us to appear before the Committee, Mr. Mant and Thomas Jones, will be able to show how much injury is done to the fisheries in general, as well as to their own in particular, for want of ready means of convicting offenders, and it will much oblige us could you draw the attention of the Committee to this subject.

Again apologizing for thus addressing you, which I hope my situation in the parish of Warblington will excuse,

I have the honour, &c.

William Norris,
Rector of Warblington.

Appendix, No. 16.

Appendix, No. 16.

Petition from the Fishermen of Plymouth.

The humble PETITION of the Owners of Vessels employed in the Fisheries belonging to the Port of *Plymouth*, in the County of *Devon*.

Showeth,

THAT the prosperity of the fisheries of this kingdom have added greatly to the public wealth and safety, and have mainly contributed to the manning of our fleets, being a nursery for seamen.

That there are within the Port of Plymouth 50 sail of decked vessels, and above 150 sail of large yawls engaged in trawl and other fisheries, which afford employment to upwards of one thousand men and boys.

That these fishermen and their families are now labouring under the greatest distress, more particularly those engaged in the trawl fishery of this port, which your petitioners humbly conceive may in part be attributed to the admission of fish caught by foreign vessels, especially from the Coast of Holland.

That the Dutch now bring their fish in great quantities to British markets, and are consequently draining from British industry a large capital, which enables the Dutch fishermen to live in comparative affluence, whilst our own fishermen and their families are, and have been for some time past almost reduced to a state of starvation, which the numerous and heavy appeals made by them for assistance from the poor-rates too fully prove.

That the trawl fishery of this port, which a few years back was in a most prosperous state, from the ready market which London, Bath, Bristol, &c. afforded, and the remunerating price obtained there for turbots and other prime fish, which then allowed the capital embarked in it to be a source of profit, and a comfortable living to the fishermen and their families, has now become almost ruinous to the owners, who not being able to find any other employment for their vessels, are compelled either to keep them at sea, with the melancholy prospect of their being every year more and more involved in debt, without the hope of experiencing a return of any portion of the prosperity of preceding years to extricate them from their present difficulties, or by laying up the greater part of the vessels; by the adoption of which latter alternative their crews and families would be permanently fixed on the parish funds, and the vessels be destroyed by decay. Your petitioners therefore beg to lay before the House their present distressed condition, in the hope that the House will extend to them such relief and protection as the House may deem expedient.

And your petitioners, as in duty bound, will ever pray, &c.

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Appendix, No. 17.

Memorial from the Fishermen of Folkestone.

MEMORIAL of Owners and Masters of Vessels belonging to the Port of *Folkestone*, with several Papers.

TO HIS GRACE THE DUKE OF WELLINGTON, K.G.

First Lord Commissioner of His Majesty's Treasury, &c. &c. &c.

THE MEMORIAL of the Owners and Masters of Vessels belonging to the Port of *Folkestone*, employed in the Herring and Mackerel Fisheries.

Humbly showeth Your Grace,

THAT your memorialists are engaged to a considerable extent in the herring and mackerel fisheries, a branch of British industry which has ever been held in great estimation.

That for a long period this occupation was carried on with, on an average of seasons, a fair return for the capital and enterprize of your memorialists; but for several years past the return, from a variety of circumstances, has become so limited as to threaten to destroy this capital and enterprize, unless some remedy is speedily applied.

That the greatest subject of complaint on the part of your memorialists is the very aggressions made upon them in the lawful pursuit of their occupations, particularly on the part of the French fishermen.

That the vessels of your memorialists do not exceed the burthen of 30 tons, and the most of them burthen only from 20 to 25 tons, whilst those of the French fishermen are from 30 to 60 tons, and being manned in proportion, a superiority of strength has been displayed which your memorialists have generally been obliged to submit to.

That whilst your memorialists have customarily fished within their own limits, rarely, if ever, visiting the opposite coast, the French fishermen have been continually annoying them, frequently in sight of their own dwellings, by destroying their nets, injuring their vessels, and not unfrequently depriving them of the fruits of their labours.

That the mode of fishing usually adopted by the French fishermen necessarily lead to these results, inasmuch when the nets of your memorialists are cast out the former allow

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Memorial from the Fishermen of Folkestone.

their vessels, which very often follow the track of the British, to drive with the tide along the line of the British vessels, when the French nets are drawn under the British nets. Thus, independent of frequently destroying the latter, the French fishermen avail themselves of the opportunity to obtain the fish which had been lawfully enclosed by your memorialists, by compelling, from superior strength, your memorialists to leave their stations.

That the various affidavits of the masters of Folkestone fishing-boats, which accompany the present memorial, will fully detail and confirm the conduct complained of to your Grace.

Your memorialists therefore humbly and most earnestly beg that Your Grace will be pleased to take the subject into consideration, and from the great national advantages derived from the British fisheries, as well as from a concern for the humble interests of your memorialists, will be further pleased to adopt such measures as will ensure an adequate protection to the capital and enterprize of your memorialists in the pursuit of their arduous and dangerous occupation.

And your memorialists will ever pray, &c. &c. &c.

Signed by

Wm. Stace,
Thomas Farley,
Pilcher Jones,
William Bennett,
Thomas Brice,
Richard Baker,
Richard Cornish,
Adam Daniel,
William Hall,
Henry May,
John Pope,
Isaac Pope,
Thomas Pope,
Zachary Petman,
&c. &c. &c.

Folkestone, 1 Sept. 1829.

AFFIDAVITS.

No. 1.—*Thomas Brice,* master of a fishing lugger, Rover, 28 tons burthen, carrying nine men. In the herring season, 1825, being off Hythe, about two miles from the shore, we cast our nets, when a French fishing-boat sailed into them and cut away 12 nets from our complement. In the mackerel season of 1828 we cast our nets, when a French boat sailed into them and cut away seven nets from our complement, and done us other damage. In the herring season of the same year we cast our nets about four miles from the North Foreland, when seven or eight French boats hooked up our nets to see if there was any fish in them; by so doing they did considerable damage to them, and for several seasons past we have been much troubled by them, as they frequently prevent us from casting our nets, and often when we have cast them we are obliged to get them in again, although close to the English shore.

(signed) *Thomas Brice.*

Sworn at Folkestone, this 2d day of Sept. 1829, before me, at the Guildhall,
John Minter, Mayor.

No. 2.—*Adam Daniel,* jun. master of the Dart, of 30 tons, carrying nine men, states as follows:—Several times during the fishing seasons I have been interrupted and prevented from fishing by the French boats, and particularly on the 24th October 1825, I was about three miles from the English shore; I had brought up in a berth to cast my nets, three large French boats, about 60 tons, from 20 to 30 men each, came and cast their nets close to me, and drove me away again. On the 13th of November a French boat, when I was about a mile from the shore, off Folkestone, drove against my craft and wantonly cut my nets. Again, on the 16th of the month, I was off Dungeness, about three quarters of a mile from the shore, a French boat took my nets out of the water and destroyed them; and on the following day and night, off Dungeness, about three miles from the shore, the French boats destroyed my nets, in like manner, in the year 1825. 1828, November the 15th to 24th, or near that time, being moonlight as day, I saw a French boat come and steal eight nets, ropes, and barrels, the value of them were about 10*l.*, they were marked Adam Daniel, Dart, Folkestone; besides the loss of time of catching of fish which were never recovered by me. And every season I have been annoyed by the French on our coast, and often within one or two miles of the shore, either by being drove some miles from my berth, or by their casting their nets close to our's, so as to make us get our's on board for fear of damage by their superior strength, which at different times has been a very great loss to us.

(signed) *Adam Daniel.*

Sworn at Folkestone, on this 3d day of Sept. 1829, before me,
John Minter, Mayor.

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Memorial from the Fishermen of Folkestone.

No. 3.—I, *William Hall*, of Folkestone, have been master of a fishing-boat, burthen 20 tons, carrying nine men, for the last 15 years, always employed in catching herrings and mackerel. For this last seven years have been much annoyed by the foreign boats, chiefly French boats. Being in mackerel season of 1823, I was going to cast my nets, when a boat belonging to Boulogne sailed so close to me that I thought their meaning was to run me down, but they passed me, and holding up a hatchet, told me to go home, for if I cast my nets they would cut and sink them; I was then about 10 miles from Calais, and have not been there since. For this several seasons past I have had damage done to my nets, by their hooking them up to see whether we were taking any fish; this they do when under sail, and frequently all night when they cannot take a great quantity of fish themselves: I have seen three boats fast to my nets at one time. In 1825, herring season, there was about 100 sail of French boats between Folkestone and Hythe fishing about one mile from the shore, in day time, and then the French boats kept hooking up our nets and damaging them: we called out to them, but they took no notice of us. I went into the harbour for fear of damage or losing my nets, and lost that night's fishing, and many times been obliged to go some miles to get clear of them, for when they get their nets on board they often come to anchor, and we drive athwart them; this we never do when any boats are fishing. On the 17th June 1829, about half-past one o'clock in the morning, a French boat took hold of my nets when under sail, and took nearly three nets, cut a three-inch rope, and let adrift 80 nets from me, and sailed away for Calais; we was then about eight miles from the North Foreland. Every season, and frequently during the season, I have been annoyed by the French boats on our own coast, and often within a mile or two from the shore, either by being drove some miles from the place where I intended to cast my nets, or by their casting their nets close to mine, so as to make me get mine on board for fear of damage done to my nets by their superior strength.

(signed) *William Hall.*

Sworn at Folkestone, this 2d day of September 1829, before me, at the Guildhall,
John Minter, Mayor.

No. 4.—*John Pope*, master of the Blucher fishing lugger of 20 tons burthen, carrying nine men, and *Richard Baker*, master of the Kitty fishing lugger of 20 tons burthen, carrying nine men. We have been considerably annoyed by French fishing boats almost every season; and many times in the season we have been prevented from casting our nets when within a mile or two of our own shore, and often when our nets have been cast have been obliged to work them in again for fear of damage by them, on account of their superior strength, which has been a great loss to us.

(signed) *John Pope.*
Richard Baker.

Sworn at Folkestone, on this 2d day of Sept. 1829, before me, at the Guildhall,
John Minter, Mayor.

No. 5.—*Zachary Petman*, master of a fishing lugger of 20 tons burthen, carrying nine men. In the herring season of 1827, being about two miles from the English shore, we cast our nets; soon after a French boat came and got hold of my nets. I called my men out to get our nets in. Looking up, I hailed him, and asked him if he were robbing our nets, and he made us no answer. We hauled up close to his stern; he then let go our nets, and said, "all clear, John," and set sail. We had been hauling between 100 or 200 herrings in a net, and when we came to the place where the Frenchman was there was no herrings in the nets, but the nets were damaged. We have every reason to believe he had taken 2,000 or 3,000 fish from them. We have received other damage from them, and often times obliged to get our nets after being cast; and sometimes had them torn to pieces by their hooking them up.

(signed) *Zach. Petman.*

Sworn at Folkestone, on this 2d day of Sept. 1829, before me, at the Guildhall,
John Minter, Mayor.

No. 6.—*Henry Sanders*, master of a fishing lugger of 24 tons burthen, carrying nine men. In the year 1826 we cast our nets between Fairleigh and Beachy Head, about five leagues from the British shore, when a French boat came down to our nets and along them, for one hour or more. Was afraid he would do us damage, but was afraid to get our boat out to see, as it blowed strong at the time. In getting our nets in the morning we found our rope cut, and between 60 and 70 nets, and eight or 10 ropes was gone. Shortly after we heard they

 were

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Memorial from the Fishermen of Folkestone.

were carried into Treport by a French fishing-boat. We went to Treport after them, and they charged us upwards of 20*l.* for taking them in, and was obliged to pay it before they would let us have the nets. I have been damaged at other times by French boats, and been much injured in fishing, by being drove from my berth, and have often been obliged to get my nets in again soon after being cast, for fear of damage by them.

(signed) *Henry Sanders.*

Sworn at Folkestone, on this 2d day of Sept. 1829, before me, at the Guildhall,
John Minter, Mayor.

No. 7.—*Edmond Warman.*—I am master of fishing lugger of 25 tons, carrying nine men; and have been employed chiefly in the herring and mackerel seasons. In the year 1824 I was abreast of the North Foreland, and running into the Downs, when a foreign fishing-boat purposely and designedly run foul of my weather quarter, and broke several of my rails, and sprung my out-ticker. On the 13th of November of the same year we were abreast of Sandgate, about three quarters of a mile from the shore, when a French boat cast his nets right into ours. Soon after we worked our nets, and found that two nets had been cut out and carried away.

In the herring season of 1827 we cast our nets about two miles to the eastward of Folkestone, and about one mile from the shore, when a French fishing-boat cast his anchor in a direction where my nets was drifting; when they came near him he cut my rope, and parted me from 30 to 40 nets, which he could have prevented, as the weather was moderate, and the wind off shore. The same season we cast our nets off Folkestone, about one mile from the shore, when a French boat came and cast his nets so close to ours that they very soon came together. On working up to him we found our rope cut and parted from about 20 pieces of net. Almost every season, and many times during the season, we have been annoyed by the French boats on our own coast, and often within a mile or two of the shore, either by being drove some miles from our berth, or by their nets driving into ours, so as to make us get them on board for fear of damage.

The + mark of
Edmond Warman.

Sworn at Folkestone, this 2d day of Sept. 1829, before me, at the Guildhall,
John Minter, Mayor.

No. 8.—*Stephen Warman*, master of a fishing lugger of 27 tons burthen, carrying nine men. In the herring season, November 13, 1825, we were off Hythe, about a mile from th shore, our nets were out, and we were drifting with the tide, two French came close to our nets, and cast their nets in such a manner, that they obliged us to hawl our nets in, and prevented us catching fish. Again, on the same evening, we cast our nets, and were in like manner obliged to get them in by a Frenchman casting his nets close to ours, and getting foul of them. We then went a considerable distance from them, and cast our nets the third time, and there came another French boat, and got hold of our nets. I asked them civilly to let them go; they made me no answer, but held fast. At the time this happened there was another boat laying at the other end of our nets; when we worked up to about where he was there was 12 of our nets cut and carried away, rope and all. On the 17th we cast our nets again off Sandgate, about half a mile from the shore. William Wood, master of a Sandgate boat, told us he saw a French boat close to our nets. We then went to work to get our nets in again, when he came about the middle of our nets. We had a whole rope and six nets cut and carried away; we got hold of the remaining part that was left. In working them in we found at the further end another whole rope and seven nets cut and carried away. November 1826, we was going to shoot our nets, and a French boat came and drove us away, and put his there. November 1828, a French boat cast his nets foul of ours. We asked him to haul them in, but he would not; we was then obliged to get ours in, and we found that we had three nets torn to pieces by them. We have at many other times received damages by them, and been often hindered from casting our nets, and times after we have cast them we have been obliged to get them in.

Stephen Warman's + mark.

Sworn at Folkestone, on this 2d day of Sept. 1829, before me, at the Guildhall,
John Minter, Mayor.

No. 9.—*Thomas Pope*, master of a fishing lugger of 26 tons burthen, carrying nine men; *John Wraith*, master of a fishing lugger of 24 tons, carrying nine men; *Jacob Spicer*, master of a fishing lugger of 15 tons, carrying seven men; *Richard Cornish*, master of a fishing lugger of 24 tons, carrying nine men; *Isaac Pope*, master of a fishing lugger of 30 tons, carrying nine men; *Henry May*, master of a fishing lugger of 24 tons burthen, carrying nine men; *William Wood*, master of a fishing lugger of 29 tons burthen, carrying nine men.

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Memorial from the Fishermen of Folkestone.

During the herring and mackerel seasons we have been greatly annoyed and much hindered from catching of fish by the French fishermen, as they make a practice of hooking up our nets to see if there is any fish in them, and if they find there is they cast their nets close to ours, and by the manner of their casting nets do us more damage than we do them, whereby we are generally obliged to get our nets on board again, and often we are completely drove from the places where we have fixed for casting nets, and they have taken our places, which is against the custom of English fishermen. This has frequently been done within two or three miles of the English shore.

(signed) *Thomas Pope,*
John Wraith,
The × mark of
Jacob Spicer,
The × mark of
Richard Cornish,
Isaac Pope,
The × mark of
Henry May,
William Wood.

Sworn at Folkestone, on this 2d day of September 1829, before me, at the Guildhall,
John Minter, Mayor.

LETTER to the Right Honourable the Earl of *Radnor.*

My Lord, Folkestone, 12 September 1829.

WE take the liberty to enclose your Lordship a memorial to his Grace the Duke of Wellington from the owners and masters of vessels belonging to this place engaged in the herring and mackerel fisheries, relative to the aggressions of the French fishermen, with various affidavits confirmatory of the facts detailed in the Memorial.

It would be an unnecessary intrusion upon your Lordship were we to enter into any detail of the importance, in every point of view, of the British fisheries, and of the necessity of their being protected, in every respect, so far as is consistent with the just rights of neighbouring states, with which it is far from the intention of the memorialists to interfere; but certainly the salvation of the little property which remains of what was some years since embarked in these fisheries at Folkestone, requires that some steps should be taken in reference to the just complaints of our fishermen.

Between the years 1810 and 1820 there were 24 luggers employed in the herring and mackerel fisheries here, burthening about 625 tons, and employing on board about 220 men. The value of the property, at the first of these periods, might be estimated at about 21,600*l.*; at present only 21 are employed, three being extinguished, and these 21 cannot now be estimated at more than about 6,300*l.*, and even this small remnant of property must soon share the fate of the other, unless the fisheries become more profitable than they have for some years past been. The owners and masters of the vessels will therefore feel greatly obliged, if your Lordship will be pleased to take their case in hand, and to strengthen as much as possible with your influence the representations contained in the Memorial. It has been considered that the affidavits going in the plain language of the parties which have made them, will have more effect in relating their simple tale than if they had been put in a more technical form.

We are, very respectfully, &c.
William Stace,
Chairman of a Committee of the Masters and Owners of Fishing Vessels at Folkestone.
W. Keer Brown, Secretary.

LETTER from his Grace the Duke of *Wellington* to the Earl of *Radnor.*

My Lord, London, 19 Sept. 1829.

I HAVE received your Lordship's letter, with the memorial and the affidavits of the fishermen of Folkestone. If the facts had not been sworn to by so many individuals I should not have believed their existence possible. But I send your Lordship some short notes which I have made upon perusing the affidavits which your Lordship enclosed. There is no proof of any injury done in any case, excepting by the affidavit of one individual; no time stated; the place not described; no names given of other vessels in sight, or of the vessels from which the injury complained of was done, or of the names of those who did it.

Yet all this would be necessary in order to prove that any injury had been done; much more to prove that it was done by particular individuals, so as to obtain compensation or punishment.

I assure your Lordship that I have given great attention to this subject, but that I cannot find any means of applying a remedy, in the existing state of the fisheries, excepting to recommend increased industry to the fishermen, and that they should go to sea in such numbers and act together in concert so as to prevent all injuries on the part of their neighbours.

I have, &c.
(signed) WELLINGTON.

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Memorial from the Fishermen of Folkestone.

No. 1.—Affidavit of Thomas Brice.

No day mentioned; the spot not defined: the names of the persons on board not mentioned, nor the names of other boats employed in a similar manner.

No. 2.—Affidavit of Adam Daniel.

Day mentioned, four years ago! No other fact: persons present not mentioned.

No. 3.—Affidavit of William Halls.

Some of the complaints refer to six years ago; one of this year: the persons present in boats on the same station not mentioned.

No. 4.—Affidavits of John Pope and Richard Baker.

No day mentioned; no station defined, nor persons present; nor other boats on the same station.

No. 5.—Affidavit of Zachary Petman.

No time mentioned; no station defined: no persons present: no boats on the same station.

No. 6.—Affidavit of Henry Saunders.

This occurred three years ago; no persons present; no other boats on the station.

No. 7.—Affidavit of Edmund Warman.

This refers to three years ago; no persons present; no other boats present.

No. 8.—Affidavit of Stephen Warman.

All the instances complained of are of from one to four years standing; no accurate dates mentioned; no persons present; no other boats present.

No. 9.—Affidavits of Thomas Pope and others.

No place stated; no time stated: no witnesses mentioned. No boats, whether French or English mentioned.

LETTER to the Right Honourable the Earl of *Radnor*.

My Lord, Folkestone, 26 September 1829.

THE Committee of the fishermen of this place beg leave to express their utmost gratitude for the very great and prompt attention which the Duke of Wellington has been pleased to give to the facts contained in the Fishermen's Memorial to his Grace, and the accompanying affidavits, and for the desire manifested by his Grace for the future prosperity of the Folkestone fishery.

The Committee have also to express their thanks for the interest your Lordship takes in the success of their application for protection against the aggressions complained of.

Upon a review of the contents of the Duke of Wellington's letter to your Lordship, it has been judged most expedient that the circumstances complained of should not be further reverted to, the object of the Committee having been prospective rather than retrospective in detailing them in the memorial and affidavits; and for the future the attention of the Committee will be directed to having any injuries sustained by the fishermen substantiated in such a way as will, by attention to times, places and circumstances, offer full evidence of the truth of the facts.

In regard to many of the facts having occurred at a distant period, we beg leave to acquaint your Lordship, that in December 1825 a memorial was forwarded to the late Earl of Liverpool, complaining of the injuries which had been sustained up to that period; and the Earl of Liverpool referred the memorial to the Secretary of State for Foreign Affairs, as appears by the annexed copy of a note from his Lordship to the then Mayor of Folkestone, but no further progress was made in the business.

From a paragraph in the Duke of Wellington's letter the Committee think that his Grace appears to have received an impression (by his calling for more minute information than is contained in the affidavits) that our fishermen are soliciting the interference of Government for the purpose of obtaining some indemnification for the injuries they have sustained from the French fishermen; this, however, is not the case, as these injuries have been detailed solely with the view of inducing His Majesty's Government to afford them that protection in future which the necessity of the case appears to require.

We have been informed, through a channel which we can depend upon, that a few seasons since the Lowestoff and Yarmouth boats were much annoyed by the French boats, and that upon a representation being made, the commanding officer upon the station appointed a vessel of war to protect the British boats; this vessel cleared that part of the coast used by the Yarmouth and Lowestoff boats, and they have not been annoyed since. The fishermen of Folkestone therefore humbly solicit that a similar protection may be accorded to them, which they trust will be means of rendering the fishery more profitable than it has for some seasons past been.

We cannot, my Lord, revert, without pain, to the former extensive and prosperous state of the fishery of this town, as compared with its present reduced state.

In the year 1755, it appears there were no less than 33 luggers of from 40 to 50 tons employed in catching fish, and 26 cutters of about the same tonnage employed in carrying it to the London market: the whole tonnage of the fishery then amounted to about 2,650 tons exclusive of small open fishing boats. At present, as stated in our former letter to your Lordship, there are only 21 luggers employed, amounting to about 525 tons; and we regret to say, there appears at present no probability of any increase of employment; on the contrary, we contemplate a decrease, for, under existing circumstances, as each boat becomes unfit

unfit for sea, by reason of age, no one will be built in its place, the return being such as not to warrant any further embarkation of capital. Should, however, the required protection be granted, it is hoped that the fishery will yield such a fair share of profit as may induce some further venture to be made; this, however, will greatly depend upon the cost of outfit approaching nearer to that of neighbouring states, as it is a fact well known that the French can fit and man their boats at not much more than half the expense that the British can.

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Memorial from the Fishermen of Folkestone.

We are, &c.

(signed) *W. Stace,*
Chairman of a Committee of Owners and Masters of Fishing Vessels at Folkestone.

W. Keer Brown, Secretary.

Appendix, No. 18.

PETITION of Fishermen of *Bosham* in the County of *Sussex.*

Appendix, No. 18.

Petition of Fishermen of Bosham.

To the Honourable the Commons of the United Kingdom of Great Britain and Ireland in Parliament assembled:

The humble Petition of the Fishermen and others Inhabitants of the Parish of *Bosham,* in the County of *Sussex,*

Respectfully showeth,

THAT the harbour of Bosham is peculiarly favourable for the production of all kinds of sea and shell fish, particularly oysters, for the abundance and flavour of which it has long possessed the highest celebrity.

That within the memory of many of your petitioners, large quantities of oysters were annually exported from this place; the fishermen were a numerous body of men; their calling was considered respectable; they were accustomed to receive apprentices, and usually contributed to the parish rates; whereas, at the present time, their number is considerably diminished, many of them can scarcely obtain a livelihood, and consequently the majority are dependent on parochial bounty.

That this lamentable change has been occasioned either by the violation of rights established by local custom, the infraction of the laws relating to fisheries in general, or from the want of a sufficient protection to a locality offering prominent advantages for the production of all kinds of fish.

That at the present time are caught, to the great privation of the fishermen, and ultimate ruin of the fishery, large quantities of the young brood of different kinds of fish, particularly bass and mullet; they are so small that they are offered for sale at two-pence and three-pence a dozen, whilst this enormous abuse causes a loss in the general market of a regular supply of good fish of a proper size: the same remark, as to the abuse itself, applies in a much stronger degree, if possible, to the present state of the oyster fishery.

That your petitioners, therefore, most humbly pray your Honourable House will be pleased to take into their consideration the state of the fisheries in the harbour of Bosham, in order to the restitution of their privileges and rights, and their establishment on a permanent basis, as well as for all future encouragement of procuring fish, and particularly oysters, for consumption and exportation, by prohibiting the taking of the young brood, or in any way that your Honourable House in their wisdom may deem most expedient.

Appendix, No. 19.

LETTER from the Rev. *George Woodley,* to the Chairman of the Committee of the *British Channel* Fisheries.

Appendix, No. 19.

The Rev. G. Woodley to the Chairman of the Committee.

Sir, Scilly, 8 July 1833.

UNDERSTANDING, by the public prints, that a Committee of the Honourable House of Commons is now sitting, "on the British Channel Fisheries," I think it my duty respectfully to state that I am able and willing to put the Committee in possession of much information, which may be deemed important, relative to the fishery connected with the Scilly Islands; and I am anxious that the Committee and the public should learn all the circumstances relating to the failure of the fishery established here about 14 years since, with a view to the adoption of such measures as may seem necessary to revive so important a source of employment.

I have, &c.

George Woodley, Clergyman.

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Appendix, No. 20.

Communications on the Pilchard Seine Fishery.

LETTER from Mr. *Blewett* to *John Collier*, Esq. M. P. respecting the Pilchard Seine Fishery in Mount's Bay, Cornwall.

Dear Sir, Plymouth, 18 June 1833.

I was duly honoured with your esteemed favour of the 14th instant, respecting the fishery, but I could not devote any time to it until to-day. My opinion, formed from experience in the Mount's Bay during the seasons of 1820, 1821, 1822 and 1823, is expressed in the annexed Memorial, and Extract from the Plymouth Herald; and the result of every year since only tends to confirm it. I should be satisfied by the most rigid enforcement of the provisions of Charles the Second for a couple of years by any of His Majesty's cruizers, to prove that my conjectures are wrong, or otherwise. When the winter pilchards approach the coast, the drift boats are laid up, and large inclosures are made by the seines. In December last, about 6,000 hogsheads were taken early in the day in the Mount's Bay, close in shore, by seines: one seine had 300 hogsheads; some had from 500 to 800 hogsheads.

I think the fishery in this neighbourhood suffer also by the drift boats, though their number is small, and also by the trawl sloops; the latter, the last week absolutely trawled in the Sound: one or two just within the line of the Cobler and the buoy at the eastern point of Drake's Island, and were successful; but I apprehend the quantity of spawn destroyed must have been immense.

Conservators ought to be appointed along these coasts, where the fishery is of so much importance; and I trust the result of the Committee's labours will be the means of protecting the seine fishery from absolute ruin. A seine complete, which cost about 800*l.* a few years ago, was sold the latter end of last year for 120*l.*, and is now stationed at Mullion, in the Mount's Bay.

I have, &c.
J. E. Blewett.

Capt. Dolling, R. N. desired me to add, that he has seen the drift boats in Bigbury Bay shoot in very shallow water, when shoals of fish have been in sight approaching the shore

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TO the Right Honourable the Lords of His Majesty's Treasury.

My Lords,

The importance of the subject which I take the liberty to lay before your Lordships is unquestionably of such a serious character, that the imperfect manner in which it is described, as well as the abruptness of the address, will, I hope, meet with your Lordships' indulgence.

It is a matter of notoriety that the staple articles of commerce in the county of Cornwall consist of "fish, tin and copper;" that in each of these branches of domestic polity, a considerable number of its inhabitants are employed, and a large proportion of its capital invested; but, as the purport of my observations relate to the pilchard fishery, I shall confine myself to a brief review of its past and present state.

These fish usually visit the shore during the months of August and September, and are taken by seines and drift boats.

Each seine consists generally of three boats, with a complement of 18 men, and are stationed in the creeks and coves along the coast, as it is only in shallow water that they can be employed to advantage.

There are about 250 seines in that county and in the western part of Devonshire, and as they were chiefly purchased during the late war, or near its termination, most of them cost (including the stores and implements and the necessary quantity of salt) from 750*l.* to 1,000*l.*: thus has been invested a capital of full 200,000*l.* No less than 4,500 men are required to equip them for sea.

The boats with drift nets are from eight to fifteen tons burthen, and carry about five men each: they seldom, if ever, cost (including the stock of salt, materials, &c.) more than 200*l.* Their number amounts to about 500; they employ from 2,400 to 2,500 men; and the capital embarked therein varies from 100,000*l.* to 120,000*l.*

The annual expenses of a seine amount to near 200*l.*, and to cover this expenditure, on an average of a certain number of years, 100 hogsheads of pilchards would be necessary, while 20 hogsheads of fish are sufficient to remunerate the proprietors and crew of a drift boat, as during all the summer months these boats are employed in the deep-sea or mackerel fishery, and sometimes in pilotage.

The pilchard fishery, when confined to the drift boats, is very inadequate to the supply even of the demand for domestic purposes, and can never become either an object of national

national importance, a great benefit to the community, a source of employment to the labouring classes of both sex residing near the sea-shore, an extensive nursery for a hardy race of seamen, or a desirable investment of capital: while all these advantages, for a long series of years, resulted from the seine fishery, but which, without the interference and authority of your Lordships, it is very much apprehended can never more be realized, owing to the pernicious practice now generally adopted by the drift boats.

The seine fishery has, with a few exceptions, been for a very long period a most unprofitable speculation; but from the inability of the adventurers to effect sales of the property thus invested, they are necessarily compelled to persevere under the delusive hope of a favourable change. During the late war, the fishery in general was successful, though unprofitable, as the difficulty to effect sales for a foreign market kept the price extremely low, while the expenses of every description were extravagantly high. On the return of peace a different state of things was confidently anticipated, and for the first or second year these hopes were, in some degree, realized; but to the number of seamen who returned about that time to their native abode and embarked in the fishery, may be attributed the vast increase of drift boats, and from which period the seine fishery has been gradually getting worse, until at present it is reduced to the lowest state of ruin, and to the adventurers therein of repeated disappointment and despondency.

To account for this state of unproductiveness it is necessary to observe, that although pilchards, particularly during the season just terminated, have been found in numerous and immense shoals along the coast, yet they have been prevented from approaching near the shore by the intervention of the drift nets.

Many of the drift boats have recently sunk their nets about four fathoms below the surface of the water, while others continue their former practice of floating them by corks on the surface; and taking the depth of these nets to be five fathoms each, it follows that the shoals of fish are intercepted by two sets of nets thus constructed, for the depth of nine to ten fathoms. This mode of fishing, if confined to the distance of one and a half league, as prescribed by law, would no doubt be advisable and judicious; but when carried on within half a mile from the shore, in bays and creeks, as was often the case during the last summer, (particularly by about 200 of these boats in the Mount's Bay,) it becomes the most effectual system that could be devised to ruin the seine fishery, inasmuch as it presents an almost impenetrable barrier to the shoals of fish in their approach towards their favourite haunts, where seines are stationed to enclose them. The consequence has recently been more apparent than for many years past, by the invariable and unusual success of the drift boats, and chiefly when fishing near the land, while the seine fishery has again almost entirely failed.

Seines are sufficiently deep to enclose fish in about 15 fathoms; but I have, in the year just passed, sounded alongside drift boats at 5 p. m.; their nets then overboard, and found the depth of water not to exceed 12 fathoms; the distance from the land being not more than half a mile, while several seines laid a short distance within them. The nets therefore, which were sunk four fathoms below the surface, could be no further than three fathoms from the bottom, while those floated by corks were distant from thence but seven fathoms only.

The seines in general enclose fish as the sun is sinking below the horizon; but the drift boats frequently cast their nets overboard at the depth of water and distance from the land before described, long previous to that period; thus most effectually checking the progress of the fish, and often blasting the brightest prospects of the seine owners.

The owners of the drift fishery find it advantageous to pursue this plan for various reasons; first, that by taking fish near the shore a vast deal of labour is saved, and wear and tear prevented; secondly, the less quantity caught by the seines, the higher the price invariably becomes to supply the demand for exportation.

I understand that the seine fishery was reduced to a state equally alarming during the reign of Charles the Second; and that the Legislature, to prevent such an important branch of domestic commerce from falling into decay, passed into a law certain provisions for regulating the seine and drift fishery, which are now almost deemed obsolete by the fishermen; but which, if enforced by your Lordships' authority, would again effectually remedy the evils now most injuriously existing, and which at that time were considered the principal cause of its ruinous state.

By this Act drift boats are prohibited under very heavy pains and penalties from fishing within the distance of one league and a half from the land; but from there being no conservators of the fishery appointed, and the repugnance of individuals to become public accusers, its salutary clauses, though well understood, and often promulgated amongst the fishermen, have fallen into disuse, until it is now deemed by them a dead letter.

These serious disadvantages might, I humbly imagine, be very effectually removed without incurring any expense to His Majesty's Government, by your Lordships causing instructions to be given to the officers engaged in the protection of the revenue, whether employed on shore under the direction of the Commissioners of the Customs and Comptroller of the Water Guard, or afloat by the authority of the Admiralty, to enforce the statutes of the Act in question.

Appendix, No. 20.

Communications on the Pilchard Seine Fishery.

I venture further to submit, with every degree of deference, for your Lordships' consideration, the propriety of causing every drift boat to be enrolled and numbered at the Custom-house of the port to which they belong; and that such numbers should be painted in conspicuous figures on the bows and quarters; and also on one of the principal working sails of each boat; a plan, by its easy mode of detection, that would not only counteract the illegal practices resorted to in the pilchard fishery, but materially check smuggling.

Hoping that your Lordships will deem the protection and consequent preservation of the pilchard seine fishery an object deserving your consideration.

I have, &c.
J. E. Blewett,
Manager of four Seines in the Mount's Bay,
for the last three seasons.

Plymouth, 1 January 1823.

EXTRACT from the *Plymouth Herald*, 1827 or 1828.

The Pilchard Seine Fishery.

This once productive branch of the local commerce of our western shores, which formerly gave life and animation during two months of the year to a large proportion of the labouring population, appears falling rapidly to decay.

Each succeeding year brings loss and disappointment to the adventurers. There is unquestionably some radical defect now existing, and which only requires the interposition of authority to remove.

Fish in great abundance have been discovered on our coasts, both during this most disastrous season, and the many unsuccessful ones which have preceded it; but they have not approached the shore; this cause has been attributed generally to the drift nets in breaking the shoals, and intercepting the fish on their progress towards their favourite haunts in shallow water.

The seine fishery was reduced to a similar ruinous state in the time of Charles the Second, arising from the same cause. An Act for its improvement, encouragement and protection, passed in that reign; but as its salutary provisions are not now enforced by authority, the present unproductiveness of the seine fishery is attributable.

The herring and oyster fisheries are regulated and protected by men-of-war; and as neither is superior in point of importance to the pilchard fishery, it is a subject well deserving the liberal and enlightened mind of his Royal Highness the Lord High Admiral, to extend his fostering care also to this part of our domestic resources.

In consequence of the failure of the fishery in 1822, an adventurer who had devoted much time and attention to the subject, petitioned the Lords of the Treasury for the interference of the coast guard and revenue cruizers to afford it protection; but he was briefly informed that the law could be enforced on the information of any person who felt aggrieved. Had the prayer then been granted, it is probable that long ere this, the exertions of the seine owners would be crowned with success. A considerable number of vessels found employment annually in conveying some of its produce to the Italian markets; and the poorer classes of our population were supplied with a cheap and favourite food.

Appendix, No. 21.

AN ACCOUNT of Fish (Eels and Sturgeons excepted), sent by Water to the *London* Market, from 19 to 24 June 1833, both Days inclusive.

No.	Date of Arrival at the Nore.	Date of the Entry at Coast Office.	VESSELS' NAMES and MASTERS' NAMES.	Fresh Salmon.	Maids. Plaice.	Turbot.	Fresh Cod Fish.	Thornback and Skate.	Haddock	Mackerel.	Lobsters.	Soles.	Whitings.
	June 1833:			*Boxes.*	*Bushels.* M. P.							*Bushels.*	
1	16	17	Resolution, R. Whiting	- -	- -	- -	- -	- -	- -	- -	6,000	—	
2	16	17	Good Hope, H. Fowler	- -	- -	- -	- -	- -	- -	- -	6,000	—	
3	15	17	Myrtle, E. Bellinger	- -	0 40	20	—						
4	16	17	Morning Star, J. Pollard	- -	0 20	40	—						
5	15	17	Atalanta, W. Mitcham	- -	- -	25	- -	50	—				
6	17	17	Betsy, J. Ellot	- -	- -	- -	- -	- -	- -	2,000	—		
7	15	17	Prosperous, E. Wade	—									
8	15	17	Bulow, Daniel James	- -	- -	- -	- -	- -	- -	7,000	—		
9	16	17	Industry, W. Hearne	- -	- -	- -	- -	- -	- -	- -	4,000	—	
10	16	17	Diligence, R. Appleton	- -	- -	- -	- -	- -	- -	- -	7,000	—	
11	15	17	Halcyon, Samuel Tisdell	- -	- -	10 score.	- -	- -	- -	- -	2,000	—	
12	16	17	Ebenezer, W. Hale	- -	- -	- -	14	- -	45 score.	—			
13	16	17	Happy Return, J. Fraiser	- -	0 30	11	—						
14	16	17	Salacia, H. Merchant	- -	0 30	20	—						
15	16	17	Horatio, W. Merchant	- -	0 10	24	- -	- -	- -	- -	- -	17	
16	16	17	Dispatch, G. Stubbs	- -	0 20	37	- -	- -	- -	- -	- -	11	
17	17	17	Swift, W. Emsoll	- -	0 10	28	- -	- -	- -	- -	- -	12	
18	16	17	Olive Branch, J. Sunerway	- -	0 60	19	—						
19	16	17	Salacia, J. Sadler	- -	- -	- -	- -	- -	- -	- -	8,000	—	
20	16	17	Ebenezer, T. Precious	- -	- -	- -	- -	- -	- -	- -	10,000	—	
21	16	17	Flora, J. Scott	- -	- -	- -	- -	- -	- -	- -	8,000	—	
22	16	17	Endeavour, R. Death	- -	- -	- -	- -	- -	- -	- -	10,000	—	
23	16	17	Kent, J. Stiles	- -	- -	- -	- -	- -	- -	- -	12,000	—	
24	16	17	Adventure, J. Ward	- -	- -	- -	- -	- -	- -	- -	12,000	—	
25	16	17	Waterloo, B. Johnson	- -	- -	- -	- -	- -	- -	- -	- -	- -	300
26	16	17	Sovereign, C. Grundy	- -	- -	- -	- -	- -	- -	- -	- -	- -	300
27	15	17	Britannia, G. Wilson	- -	- -	- -	- -	- -	- -	1,000	—		score.
28	15	17	Mary, B. Snood	- -	- -	- -	- -	- -	- -	1,000	—		
29	16	17	Amity, W. Wilson	- -	- -	- -	- -	- -	- -	11,000	—		
30	16	17	New Union, G. Rayner	- -	- -	- -	- -	- -	- -	7,000	—		
31	17	17	Stately, F. Finlay	30	—								
32	17	18	Vrow Abennena Johannah, J. Dann.	- -	- -	400							
33	17	18	Mermaid, J. Gale	- -	0 70	4 score.	- -	- -	- -	- -	- -	10	—
34	17	18	Liberty's Increase, H. Merchant.	- -	0 30	27	—						
35	17	18	Harmony, J. Scarborough	- -	0 70	20	- -	- -	- -	- -	- -	11	—
36	16	18	Piper, J. Walden	- -	0 20	4 score.	- -	- -	- -	- -	- -	4	—
37	17	18	William and Hannah, M. Pennell.	- -	- -	- -	- -	- -	- -	- -	- -	- -	32 score.
38	16	18	Sovereign, F. Danson	- -	- -	687	—						
39	16	18	Adventure, F. Gardiner	- -	- -	- -	- -	- -	- -	- -	6,000	—	
40	16	18	Cobbold, J. Reed	- -	- -	- -	- -	- -	- -	- -	6,000	—	
41	16	18	Rover, W. Totham	- -	- -	- -	- -	- -	- -	- -	6,000	—	
42	17	18	Sarah & Mary, W. Whormby	- -	0 6	- -	- -	- -	- -	- -	- -	- -	30
43	15	18	Spencer, R. Lightfoot	- -	- -	- -	- -	- -	- -	5,000			
44	15	18	Maria, R. Baldock	- -	- -	- -	- -	- -	- -	5,000	—		
45	15	18	Nancy, C. Creed	- -	- -	- -	- -	- -	- -	6,000	—		
46	16	18	Guardian, W. Butler	- -	- -	- -	- -	- -	- -	4,500	—		
47	16	18	Hannah, — Weller	- -	- -	- -	- -	- -	- -	4,000	—		
48	16	18	Dart, H. Creed	- -	- -	- -	- -	- -	- -	6,000	—		
49	16	18	Burdett, J. Sullen	- -	- -	- -	- -	- -	- -	4,000	—		
50	16	18	Eliza, H. Masterman	- -	- -	- -	- -	- -	- -	5,700	—		
51	16	18	Burdett, G. Martin	- -	- -	- -	- -	- -	- -	6,000	—		
52	17	18	Atalanta, W. Martin	- -	- -	- -	- -	- -	- -	5,000	—		
53	17	18	Magnet, J. Bartholomew	- -	- -	- -	- -	- -	- -	6,000	—		
54	17	18	Active, W. Gale	- -	2 22	—					—		
55	16	18	Aurora, J. Brown	- -	0 75	46	- -	- -	- -	- -	- -	18	—
56	16	18	Idass, J. Moss	- -	10 60	7	- -	Skate. 4	- -	- -	- -	4	—

19 June 1833,
Coast Office, Custom-house, London.

C. Boyd, jun.
Collector.

676.

No.	Date of Arrival at the Nore.	Date of the Entry at Coast Office.	VESSELS' NAMES and MASTERS' NAMES.	Fresh Salmon.	Maids. Plaice.	Turbot.	Fresh Cod Fish.	Skate.	Haddock	Mackerel.	Lobsters.	Soles.	Whitings.
	June 1833.			*Boxes.*	*Bushels.* M. P.							*Bushels.*	
1	17	19	Coronation, J. Vickery	- -	- -	- -	10	- -	100 score.	- -	- -	- -	5
2	18	19	Providence, J. Butcher	- -	- -	- -	- -	- -	- -	- -	- -	- -	100 score.
3	18	19	Brothers and Sisters, S. Fisher.	- -	- -	- -	- -	- -	- -	- -	- -	- -	300 score.
4	18	19	King George, B. Powell	- -	- -	- -	- -	- -	- -	11,000	—		
5	17	19	Sarah, J. Turner	- -	- -	100	- -	- -	- -	- -	- -	30	—
6	18	19	Dependence, J. Davis	- -	10 0	40	—						
7	18	19	Providence, R. Parker	- -	- -	37	—						
8	18	19	Nancy, J. Weale	- -	- -	- -	- -	- -	- -	- -	6,000		
9	18	19	Queen of Scotland, R. Beverley.	130	—								
10	17	19	Diamond, J. Rouse	- -	- -	- -	- -	- -	- -	- -	5,000	—	
11	19	20	Silenus, Jude Greenwood	- -	0 10	4 score.	—						
12	18	20	Caledonia, J. Gale	- -	0 10	20	—						
13	19	20	Star of Brunswick, J. Pritty	- -	- -	140 score.	—						
14	19	20	Happy Return, T. Bishop	- -	- -	- -	4	- -	17	- -	- -	- -	240 score.
15	19	20	Rachel, J. Hodgman	23½	—								
16	18	20	Elizabeth, S. Simmerson	- -	- -	- -	- -	- -	- -	- -	5,000	—	
17	18	20	Friends, E. Jones	- -	0 40	5	—						

21 June 1833,
Coast Office, Custom-house, London.

C. Boyd, jun.
Collector.

	June 1833:												
1	20	21	Mariner, E. Bate	- -	- -	140	—						
2	20	21	British Rover, T. Carrington	- -	- -	- -	- -	- -	- -	- -	12,000	—	
3	20	21	Providence, W. Soward	- -	- -	- -	- -	- -	- -	- -	- -	- -	300 score.
4	20	21	Fame, Daniel Catlin	- -	- -	60	- -	- -	- -	- -	- -	15	—
5	20	21	Maria, J. Woodhard	- -	0 60	25	- -	- -	- -	- -	- -	4	
6	19	21	Safety, T. Gale	- -	- -	180	—						
7	19	21	Laby, J. Ashford	- -	- -	100	—						
8	20	21	Prosperous, J. Earle	- -	0 20	6	- -	- -	- -	- -	- -	6	—
9	19	21	Dart, H. Creed	- -	- -	- -	- -	- -	- -	3,000	—		
10	19	21	Defiance, G. Baldock	- -	- -	- -	- -	- -	- -	5,000	—		
11	19	21	Earl Spencer, J. Lightfoot	- -	- -	- -	- -	- -	- -	7,000	—		
12	19	21	Wellington, J. Waters	- -	- -	- -	- -	- -	- -	5,000	—		
13	19	21	Diamond, A. Smith	- -	- -	- -	- -	- -	- -	6,000	—		
14	18	21	Kent, H. Simons	- -	- -	- -	- -	- -	- -	6,000	—		
15	18	21	Elizabeth and Ann, W. Bushby.	- -	- -	- -	- -	- -	- -	3,000	—		
16	19	21	Maria, R. Baldock	- -	- -	- -	- -	- -	- -	5,000	—		
17	18	21	Fox, R. Lightfoot	- -	- -	- -	- -	- -	- -	3,000	—		
18	18	21	Finish, — Dewell	- -	- -	- -	- -	- -	- -	5,000	—		
19	20	21	Mary, B. Snood	- -	- -	- -	- -	- -	- -	10,000	—		
20	20	21	Britannia, W. Whyte	- -	- -	- -	- -	- -	- -	- -	- -	- -	70 score.
21	20	21	Unity, R. Cook	- -	- -	- -	- -	- -	- -	10,000	—		
22	20	21	Mary, R. Burwood	- -	- -	- -	- -	- -	- -	- -	- -	- -	200 score.
23	18	21	Prosperous, W. Bell	- -	- -	- -	- -	- -	- -	10,000	—		
24	19	21	Union, J. Sharp	- -	- -	- -	- -	- -	- -	7,000	—		
25	19	21	Amy, J. Matson	- -	- -	- -	- -	- -	- -	8,000	—		
26	19	21	Richard & John, D. Berry	- -	0 50	7	—						
27	20	21	Liberty, J. Donally	- -	0 70	4	- -	3	- -	- -	- -	2	—
28	20	21	Perseverance, N. Frogley	- -	0 90	8	- -	- -	- -	- -	- -	5	—
29	21	22	Prince Regent, T. Sullings	- -	- -	50	- -	- -	- -	- -	- -	10	—
30	20	22	Diligence, G. Bennet	- -	- -	- -	- -	- -	- -	7,000	—		
31	21	22	Abeona, H. Easter	- -	- -	70	—						
32	20	22	Glasgow, J. Martin	30	—	score.							
33	21	22	Burdett, G. Martin	- -	- -	- -	- -	- -	- -	3,000	—		
34	20	22	Eliza, J. Davis	- -	- -	- -	- -	- -	- -	2,800	—		
35	20	22	Pearl, B. Shaseby	- -	0 100	60	- -	- -	- -	- -	- -	5	—
36	19	22	Queen Charlotte, R. Fenner	- -	- -	- -	- -	- -	- -	9,000	—		
37	18	22	Ino, J. Mothersell	- -	- -	- -	- -	- -	- -	9,000	—		
38	18	22	Celerity, J. Jones	- -	- -	- -	- -	- -	- -	12,000	—		
39	20	22	Emerald, J. Bartlett	- -	- -	2	—						
40	21	22	Ann, W. Stevenson	30	—	score.							

24 June 1833,
Coast Office, Custom-house, London.

C. Boyd, jun.
Collector.

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